

PACIFIC  
ENVIRONMENTAL  
GROUP, INC. ~~18~~ 530

SO 20110 12/16/16

January 14, 1993  
Project 305-79.01

Mr. Dan Kirk  
Shell Oil Company  
P.O. Box 5278  
Concord, California 94520

Reviewed 1/14/93  
PC.

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

Dear Mr. Kirk:

This letter has been prepared by Pacific Environmental Group, Inc. (PACIFIC) for Shell Oil Company (Shell) in response to a letter from the Alameda County Department of Environmental Health dated December 16, 1992 regarding the site referenced above (Figures 1 and 2).

**Comment 1**

*Please provide an updated time schedule listing the month and year anticipated for obtaining building and BAAQMD permits, installation of system and provision of report detailing the effectiveness of system.*

Shell is in the process of reviewing the vapor extraction well designs for the site, and anticipates completing this process by the end of January 1993. Following is the anticipated schedule for permitting, installation and effectiveness evaluation:

- o Receipt of BAAQMD permit - March 15, 1993
- o Receipt of Building Department permit - March 15, 1993
- o Bid request - March 22, 1993
- o Bid awarded - April 1, 1993
- o System installation - April 15, 1993
- o System start-up - May 15, 1993
- o System Evaluation - November 30, 1993

The schedule is contingent upon receipt of permits on the date noted. Any schedule modifications will be transmitted in writing.

**Comment 2**

*Please consider converting SHP-3 as well due to the distance between these two locations (SHP-1 and SHP-4).*

PACIFIC will install monitoring wells in the locations of Hydropunch Sampling Locations SHP-1 and SHP-4, and will install an additional monitoring well on the south side of Hegenberger Road between these two locations (Figure 2).

**Comment 3**

*... I requested TPH as motor oil or TOG added to the monitoring well analysis...there appears to be an error in Table 1 of the November 17, 1992 report under TPH-d.*

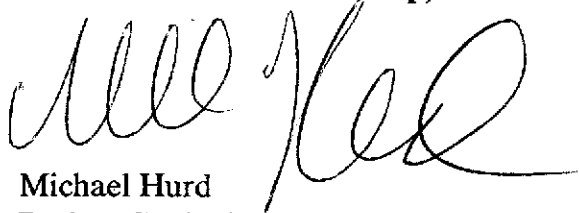
Analysis for TPH as motor oil will be performed on Wells MW-2, MW-3, MW-6, MW-7, and MW-8 during the first quarter 1993 sampling event. PACIFIC believes that these wells will adequately delineate the presence of hydrocarbon constituents within the motor oil range at the site. **Additionally, the off-site wells will be initially analyzed for TPH as motor oil.**

There was a typographical error in Table 1 of the November 17, 1992 report. The table heading incorrectly indicated the results were in parts per million. A corrected table is included with this letter in addition to the certified analytical reports (Attachment A).

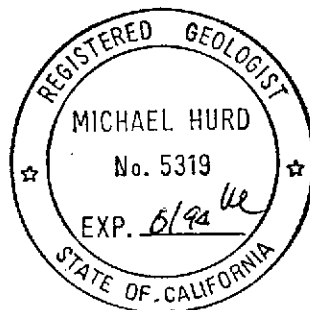
If you have any questions regarding the contents of this letter, please call.

Sincerely,

**Pacific Environmental Group, Inc.**

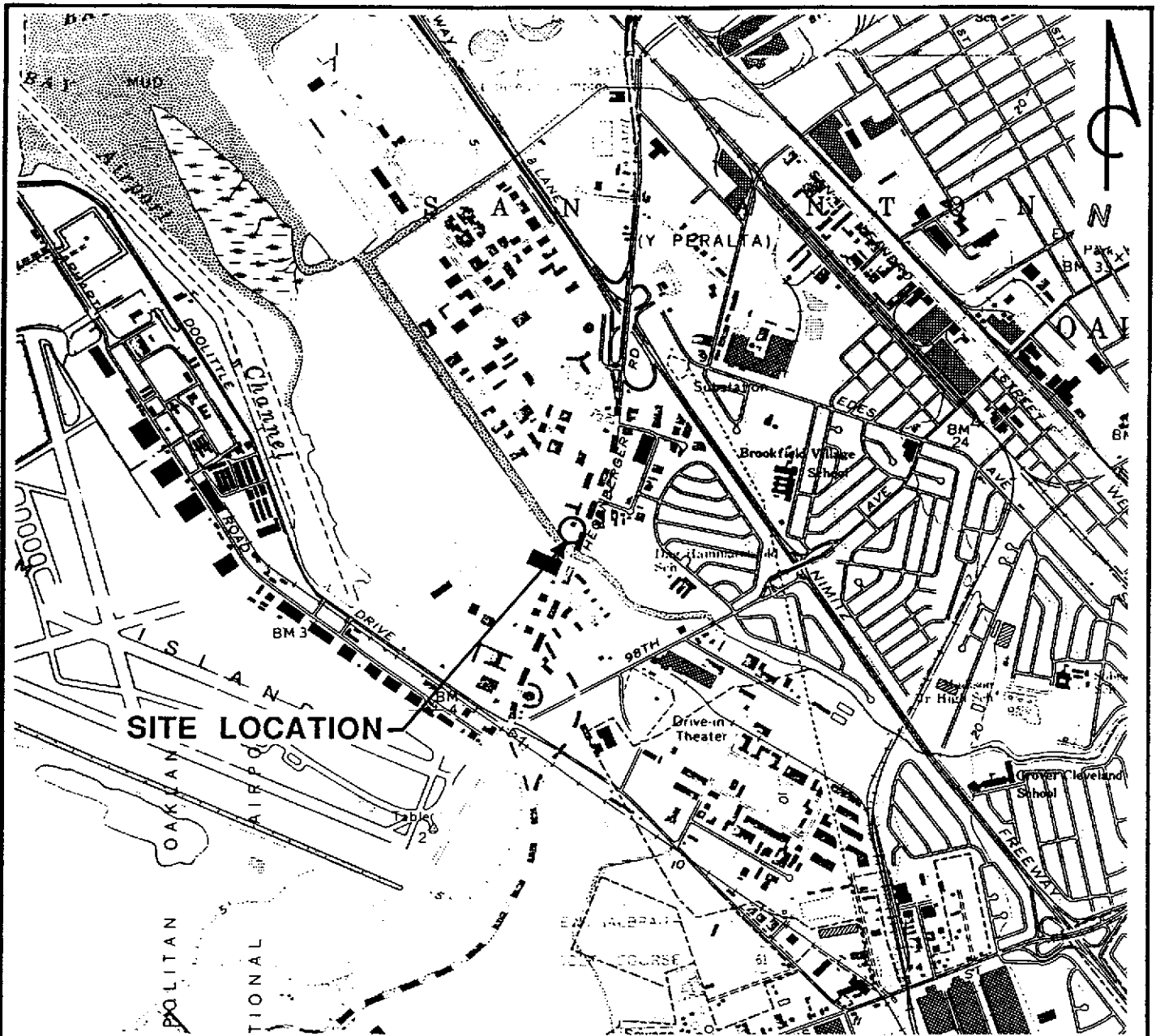


Michael Hurd  
Project Geologist  
RG 5319



Attachments: Figure 1 - Site Location Map  
Figure 2 - Proposed Well Location Map  
Attachment A - Table and Certified Analytical Report

cc: Mr. Barney Chan, Alameda County Health Care Service  
Mr. Richard Hiatt, Regional Water Quality Control Board

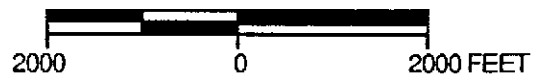


QUADRANGLE LOCATION

**REFERENCES:**

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

**SCALE**

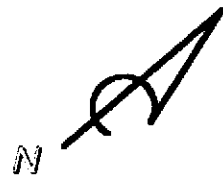


PACIFIC ENVIRONMENTAL GROUP, INC.

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

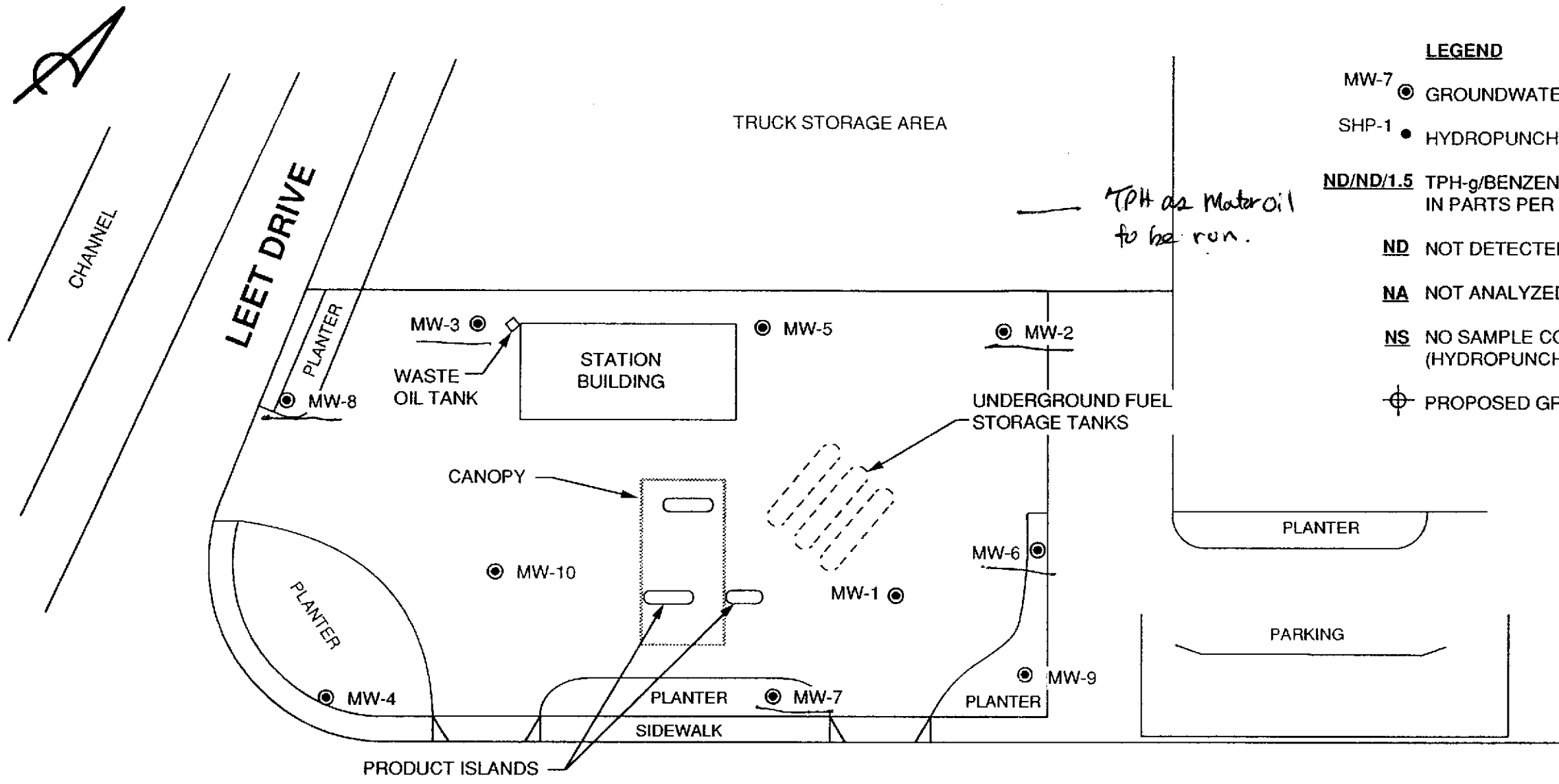
**SITE LOCATION MAP**

**FIGURE:**  
**1**  
**PROJECT:**  
 305-79.01



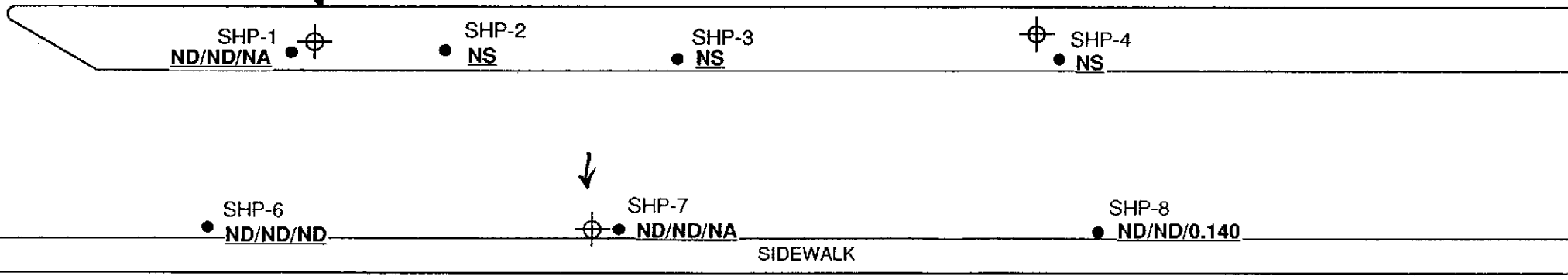
**LEGEND**

- MW-7 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- SHP-1 ● HYDROPUNCH SAMPLE LOCATION AND DESIGNATION
- ND/ND/1.5 TPH-g/BENZENE/TPH-d CONCENTRATION IN GROUNDWATER, IN PARTS PER MILLION, 9-24-92 and 9-28-92
- ND NOT DETECTED
- NA NOT ANALYZED
- NS NO SAMPLE COLLECTED (HYDROPUNCH WELL DRY)
- ⊕ PROPOSED GROUNDWATER MONITORING WELL LOCATION

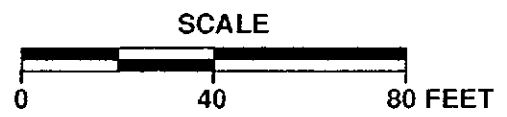


APPROXIMATE DIRECTION OF GROUNDWATER FLOW

**HEGENBERGER ROAD**



PACIFIC ENVIRONMENTAL GROUP, INC.



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

PROPOSED WELL LOCATION MAP

FIGURE:  
**2**  
PROJECT:  
305-79.01

**ATTACHMENT A**  
**TABLE AND CERTIFIED ANALYTICAL REPORT**

Table 1  
**Groundwater Analytical Data**  
**Temporary Groundwater Sampling Points**  
 Total Petroleum Hydrocarbons  
 (TPH-g, BTEX Compounds, and TPH-d)

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

Sample Number	Sample Date	TPH-g (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)	TPH-d (ppm)
SHP-1	09/28/92	ND	ND	ND	ND	ND	NA
SHP-2	09/28/92	NS	NS	NS	NS	NS	NS
SHP-3	09/28/92	NS	NS	NS	NS	NS	NS
SHP-4	09/28/92	NS	NS	NS	NS	NS	NS
SHP-5	09/25/92	ND	ND	ND	ND	ND	1.5
SHP-6	09/25/92	ND	ND	ND	ND	ND	ND
SHP-7	09/25/92	ND	ND	ND	ND	ND	NA
SHP-8	09/25/92	ND	ND	ND	ND	ND	0.14

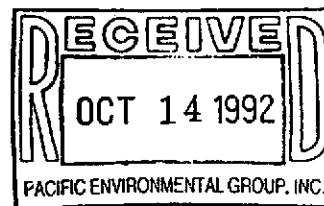
ND = Not detected  
 NA = Not analyzed  
 NS = Not sampled

*Correct values*



# SEQUOIA ANALYTICAL

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



Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tina Berry

Project: 305-79.01/SHELL-Oakland

Enclosed are the results from 1 soil sample and 4 water samples received at Sequoia Analytical on September 25, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2094088	Water, SHP-5	9/24/92	EPA 3510/3520/8015 EPA 5030/8015/8020
2094089	Water, SHP-6	9/24/92	EPA 3510/3520/8015 EPA 5030/8015/8020
2094090	Water, SHP-7	9/24/92	EPA 5030/8015/8020
2094091	Water, SHP-8	9/24/92	EPA 3510/3520/8015 EPA 5030/8015/8020
2094092	Soil, SP-1	9/24/92	California LUFT Manual, 12/87 EPA 3550/8015 EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

*Christine L. Middleton*  
Christine L. Middleton  
Project Manager



# SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tina Berry

Client Project ID: 305-79.01/SHELL-Oakland  
Sample Matrix: Water  
Analysis Method: EPA 5030/8015/8020  
First Sample #: 209-4088

Sampled: Sep 24, 1992  
Received: Sep 25, 1992  
Reported: Oct 5, 1992

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 209-4088 SHP-5	Sample I.D. 209-4089 SHP-6	Sample I.D. 209-4090 SHP-7	Sample I.D. 209-4091 SHP-8
Purgeable Hydrocarbons	50	N.D.	N.D.	N.D.	N.D.
Benzene	0.50	N.D.	N.D.	N.D.	N.D.
Toluene	0.50	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.50	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.50	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--

### Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Analyzed:	9/28/92	9/28/92	9/28/92	9/28/92
Instrument Identification:	GCHP-6	GCHP-6	GCHP-6	GCHP-6
Surrogate Recovery, %: (QC Limits = 70-130%)	97	90	90	81

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.  
Analytes reported as N.D. were not detected above the stated reporting limit.

### SEQUOIA ANALYTICAL

*Christine L. Middleton*  
Christine L. Middleton  
Project Manager





# SEQUOIA ANALYTICAL

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

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tina Berry	Client Project ID: 305-79.01/SHELL-Oakland Sample Matrix: Soil Analysis Method: EPA 5030/8015/8020 First Sample #: 209-4092	Sampled: Sep 24, 1992 Received: Sep 25, 1992 Reported: Oct 5, 1992
---	--	--

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 209-4092 SP-1
Purgeable Hydrocarbons	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Total Xylenes	0.0050	N.D.

Chromatogram Pattern: ..

### Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	9/29/92
Instrument Identification:	GCHP-7
Surrogate Recovery, %: (QC Limits = 70-130%)	90

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.  
Analytes reported as N.D. were not detected above the stated reporting limit.

### SEQUOIA ANALYTICAL

  
Christine L. Middleton  
Project Manager



# SEQUOIA ANALYTICAL

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

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tina Berry	Client Project ID: 305-79.01/SHELL-Oakland Sample Matrix: Water Analysis Method: EPA 3510/3520/8015 First Sample #: 209-4088	Sampled: Sep 24, 1992 Received: Sep 25, 1992 Reported: Oct 5, 1992
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## TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 209-4088 SHP-5	Sample I.D. 209-4089 SHP-6	Sample I.D. 209-4091 SHP-8
Extractable Hydrocarbons	50	1,500	N.D.	140
Chromatogram Pattern:		Non-Diesel Mix C10 - C19	---	Non-Diesel Mix C10 - C19

### Quality Control Data

Report Limit Multiplication Factor:	5.0	1.0	1.0
Date Extracted:	9/28/92	9/28/92	9/28/92
Date Analyzed:	9/29/92	9/29/92	9/29/92
Instrument Identification:	GCHP-5	GCHP-5	GCHP-5

Extractable Hydrocarbons are quantitated against a fresh diesel standard.  
Analytes reported as N.D. were not detected above the stated reporting limit.

### SEQUOIA ANALYTICAL

*Christine L. Middleton*

Christine L. Middleton  
Project Manager

2094088.PPP <3>



# SEQUOIA ANALYTICAL

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

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tina Berry	Client Project ID: 305-79.01/SHELL-Oakland Sample Matrix: Soil Analysis Method: EPA 3550/8015 First Sample #: 209-4092	Sampled: Sep 24, 1992 Received: Sep 25, 1992 Reported: Oct 5, 1992
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## TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 209-4092 SP-1
Extractable Hydrocarbons	1.0	N.D.

Chromatogram Pattern: ..

### Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	9/28/92
Date Analyzed:	9/28/92
Instrument Identification:	GCHP-5

Extractable Hydrocarbons are quantitated against a fresh diesel standard.  
Analytes reported as N.D. were not detected above the stated reporting limit.

### SEQUOIA ANALYTICAL

*Christine L. Middleton*  
Christine L. Middleton  
Project Manager



# SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tina Berry

Client Project ID: 305-79.01/SHELL-Oakland  
Sample Descript: Soil  
Analysis Method: California LUFT Manual, 12/87  
First Sample #: 209-4092

Sampled: Sep 24, 1992  
Received: Sep 25, 1992  
Analyzed: Oct 1, 1992  
Reported: Oct 5, 1992

## ORGANIC LEAD

Sample Number	Sample Description	Sample Results mg/kg (ppm)
209-4092	SP-1	N.D.

Detection Limits:

0.050

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

SEQUOIA ANALYTICAL

*Christine L. Middleton*  
Christine L. Middleton  
Project Manager

2094088.PPP <5>



# SEQUOIA ANALYTICAL

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

Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tina Berry

Client Project ID: 305-79.01/SHELL-Oakland

QC Sample Group: 2094088-91

Reported: Oct 5, 1992

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl- benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Sep 28, 1992	Sep 28, 1992	Sep 28, 1992	Sep 28, 1992
QC Sample #:	GBLK092892	GBLK092892	GBLK092892	GBLK092892
	MS/MSD	MS/MSD	MS/MSD	MS/MSD
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	10	9.9	9.9	30
Matrix Spike % Recovery:	100	99	99	100
Conc. Matrix Spike Dup.:	10	10	10	30
Matrix Spike Duplicate % Recovery:	100	100	100	100
Relative % Difference:	0.0	1.0	1.0	0.0

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*Christine L. Middleton*  
Christine L. Middleton  
Project Manager

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



# SEQUOIA ANALYTICAL

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Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tina Berry

Client Project ID: 305-79.01/SHELL-Oakland

QC Sample Group: 209-4092

Reported: Oct 5, 1992

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl- benzene	Xylenes	Diesel	Organic Lead
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015	LUFT
Analyst:	R. Lee	R. Lee	R. Lee	R. Lee	M. Tran	S. Chin
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Sep 29, 1992	Sep 29, 1992	Sep 29, 1992	Sep 29, 1992	Sep 28, 1992	Oct 1, 1992
QC Sample #:	GBLK092992	GBLK092992	GBLK092992	GBLK092992	DBLK092392	209-4092
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60	15	0.30
Conc. Matrix Spike:	0.19	0.19	0.18	0.55	13	0.32
Matrix Spike % Recovery:	95	95	90	92	87	107
Conc. Matrix Spike Dup.:	0.19	0.19	0.19	0.55	14	0.33
Matrix Spike Duplicate % Recovery:	95	95	95	92	93	110
Relative % Difference:	0.0	0.0	5.4	0.0	7.4	3.1

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*Christine L. Middleton*  
Christine L. Middleton  
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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Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tina Berry

Client Project ID: 305-79.01/SHELL-Oakland

QC Sample Group: 2094088-9, 91

Reported: Oct 5, 1992

## QUALITY CONTROL DATA REPORT

### ANALYTE

Diesel

Method: EPA 8015  
Analyst: M. Tran  
Reporting Units:  $\mu\text{g/L}$   
Date Analyzed: Sep 29, 1992  
QC Sample #: DBLK092892X

Sample Conc.: N.D.

Spike Conc.  
Added: 300

Conc. Matrix  
Spike: 220

Matrix Spike  
% Recovery: 73

Conc. Matrix  
Spike Dup.: 210

Matrix Spike  
Duplicate  
% Recovery: 70

Relative  
% Difference: 4.7

SEQUOIA ANALYTICAL

*Christine L. Middleton*  
Christine L. Middleton  
Project Manager

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



Site Address: 285 HECHBERGER ROAD  
 OAKLAND, CA

**Analysis Required**

LAB: SEQUOIA ANALYTICAL

WIC#: 204-5508-5504

Shell Engineer: DAN KIRK Phone No. (510) \_\_\_\_\_  
 Fax #: 675-6168

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC  
 2025 Gateway Place, Suite 440  
 San Jose, California 95110  
 (408) 441-7500 FAX (408) 441-7539

Consultant Contact: DAVID LARSEN Phone No. (408) \_\_\_\_\_  
 Fax #: 453-2269

Comments:

Sampled By: Andrew Willerton  
 Printed Name: ANDREW WILLERTON

Sample ID	Date	Soil	Water	Air	No. of conds.
SHP-5	9/24/92		✓		5
SHP-6	9/24/92		✓		6
SHP-7	9/24/92		✓		2
SHP-8	9/24/92		✓		6
SP-1	9/24/92	✓			

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

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
	HCL/NP	N	2094088	3-VOA 2-12
	HCL/NP		89	3-VOA 3-12
	HCL/WP		90	2-VOA analysis Gas/BTEX SPICU
	HCL/NP		91	3-VOA 3-12
		↓	↓ 92	

Relinquished By (signature): Andrew Willerton  
 Printed name: ANDREW WILLERTON  
 Date: 9/25/92  
 Time: 1:00

Received (signature): Mark V. Elley  
 Printed name: MARK V. ELLEY  
 Date: 9/25/92  
 Time: 4:13

Received (signature): Mark V. Elley  
 Printed name: MARK V. ELLEY  
 Date: 9-25-92  
 Time: 3:04

Received (signature): Nguyen  
 Printed name: NGUYEN  
 Date: 9/25/92  
 Time: 1:01

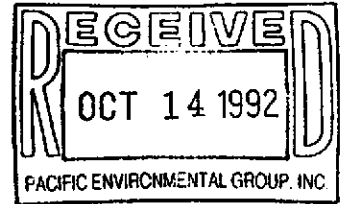
THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS





# SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233



Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tina Berry

Project: 305-79.01/SHELL-Oakland

Enclosed are the results from 1 water sample received at Sequoia Analytical on September 28, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2094227	Water, SHP-1	9/28/92	EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Christine L. Middleton  
Project Manager



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(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Tina Berry	Client Project ID: 305-79.01/SHELL-Oakland Sample Matrix: Water Analysis Method: EPA 5030/8015/8020 First Sample #: 209-4227	Sampled: Sep 28, 1992 Received: Sep 28, 1992 Reported: Oct 5, 1992
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## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 209-4227 SHP-1
Purgeable Hydrocarbons	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Total Xylenes	0.50	N.D.

Chromatogram Pattern: --

### Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	9/30/92
Instrument Identification:	GCHP-7
Surrogate Recovery, %: (QC Limits = 70-130%)	89

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.  
Analytes reported as N.D. were not detected above the stated reporting limit.

### SEQUOIA ANALYTICAL

*Christine L. Middleton*  
Christine L. Middleton  
Project Manager



# SEQUOIA ANALYTICAL

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

Pacific Environmental Group  
2025 Gateway Place, Suite 440  
San Jose, CA 95110  
Attention: Tina Berry

Client Project ID: 305-79.01/SHELL-Oakland

QC Sample Group: 209-4227

Reported: Oct 5, 1992

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl- benzene	Xylenes
	Method:	EPA 8020	EPA 8020	EPA 8020
Analyst:	R. Lee	R. Lee	R. Lee	R. Lee
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Sep 30, 1992	Sep 30, 1992	Sep 30, 1992	Sep 30, 1992
QC Sample #:	GBLK093092	GBLK093092	GBLK093092	GBLK093092
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	9.8	9.6	9.8	30
Matrix Spike % Recovery:	98	96	98	100
Conc. Matrix Spike Dup.:	9.8	9.6	9.7	29
Matrix Spike Duplicate % Recovery:	98	96	97	97
Relative % Difference:	0.0	0.0	1.0	3.3

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% 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 305-79.01  
 RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No.: \_\_\_\_\_

Date: 9/28/92

Page 1 of 1

Site Address: 285 HEBENBERGER ROAD  
 OAKLAND, CA

Analysis Required

LAB: SEQUOIA ANALYTICAL

WIC#: 204-5500-5504

Shell Engineer: DAN KIEK

Phone No. (510)

Fax #: 675-6160

Consultant Name & Address:  
 MAREANU COHEN

PACIFIC ENVIRONMENTAL GROUP, INC

2025 Gateway Place, Suite 440  
 San Jose, California 95110  
 (408) 441-7500 FAX (408) 441-7539

Consultant Contact:  
 DAVID LARSEN

Phone No. 408-

Fax #: 453-2269

Comments:

Sampled By: Andrew Willerton  
 Printed Name: ANDREW WILLERTON

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.

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	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
HTP-1	9/28/92		✓		3 VOA	✓	✓				40ml VOA	HCL/NP	N		209 42.27

Relinquished By (signature):	Printed name: ANDREW WILLERTON	Date: 9/28/92	Received (signature):	Printed name: Rebekah J. Harper	Date: 9/28/92
Relinquished By (signature):	Printed name: Rebekah J. Harper	Date: 9/28/92	Received (signature):	Printed name: P. HUFAND	Date: 9-28-92
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