



**grettler — ryan inc.**

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93-172-8  
10/2/91

LOP 36/8

March 31, 1993

Ms. Susan Hugo  
Alameda County Health Department  
80 Swan Way, Room 200  
Oakland, CA 94621

Reference: Shell Service Station  
5755 Broadway @ Taft  
Oakland, California

Ms. Hugo:

Enclosed are the results of water samples taken for the sanitary sewer on March 2, 1993. The sample results seem to indicate levels of approximately the same order of magnitude. I have enclosed all three sample results for your files.

If you need any additional information, please give me a call.

Sincerely,

Jeffrey M. Ryan

JR/kb

Enclosures



# SEQUOIA ANALYTICAL

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

RECEIVED

MAR 11 1993

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

GETTLER-RYAN INC.  
GENERAL CONTRACTORS

Project: 2850.02, Shell-Oakland

Enclosed are the results from 2 water samples received at Sequoia Analytical on March 2, 1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3C10301	Water, Sewer #2	3/2/93	EPA 5030/8015/8020
3C10302	Water, Trip	3/2/93	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

Nokowhat D. Herrera  
Project Manager

*Resample.*



# SEQUOIA ANALYTICAL

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Gettler Ryan	Client Project ID: 2850.02, Shell-Oakland	Sampled: Mar 2, 1993
2150 W. Winton Avenue	Sample Matrix: Water	Received: Mar 2, 1993
Hayward, CA 94545	Analysis Method: EPA 5030/8015/8020	Reported: Mar 10, 1993
Attention: Jeff Ryan	First Sample #: 3C10301	

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/L	Sample I.D. 3C10301 Sewer #2	Sample I.D. 3C10302 Trip Blank	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Purgeable Hydrocarbons	0.050	0.12	N.D.				
Benzene	0.00050	0.0076	N.D.				
Toluene	0.00050	0.0093	N.D.				
Ethyl Benzene	0.00050	0.0032	N.D.				
Total Xylenes	0.00050	0.020	N.D.				

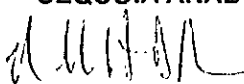
Chromatogram Pattern:                    --                    --

### Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	3/8/93	3/8/93
Instrument Identification:	GCHP-6	GCHP-6
Surrogate Recovery, %: (QC Limits = 70-130%)	109	94

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

### SEQUOIA ANALYTICAL

  
Nokowhat D. Herrera  
Project Manager



# SEQUOIA ANALYTICAL

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

Client Project ID: 2850.02, Shell-Oakland

QC Sample Group: 3C10301

Reported: Mar 10, 1993

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	C.Donohue	C.Donohue	C.Donohue	C.Donohue
Reporting Units:	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Mar 8, 1993	Mar 8, 1993	Mar 8, 1993	Mar 8, 1993
QC Sample #:	GBLK030893	GBLK030893	GBLK030893	GBLK030893
<b>Sample Conc.:</b>	0.0076	0.0093	0.0031	0.020
<b>Spike Conc. Added:</b>	0.010	0.010	0.010	0.030
<b>Conc. Matrix Spike:</b>	0.019	0.021	0.014	0.042
<b>Matrix Spike % Recovery:</b>	114	117	109	73
<b>Conc. Matrix Spike Dup.:</b>	0.017	0.018	0.013	0.047
<b>Matrix Spike Duplicate % Recovery:</b>	94	87	99	90
<b>Relative % Difference:</b>	11	15	7.4	11

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
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: 3-2-93  
Page 1 of 1

Site Address: 5755 Broadway Oakland CA

**Analysis Required**

LAB: SEQ

WIC#: 204-

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4441	24 hours <input type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	4441	48 hours <input type="checkbox"/>
Soil Classify/Disposal <input type="checkbox"/>	4442	15 days <input checked="" type="checkbox"/> (Normal)
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4452	
Water Rem. or Sys. O & M <input type="checkbox"/>	4453	
Other <input type="checkbox"/>		

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

Shell Engineer: Rob McLaren Phone No.: \_\_\_\_\_ Fax #: \_\_\_\_\_

Consultant Name & Address: Gettler-Ryan Inc. - 2150 W. Winton Ave Hayward CA 94545

Consultant Contact: Bob Lauritzen Jeff Ryan Phone No.: (510) 552-8000 783-2500 Fax #: 783-1089

Comments: Col #2850.02

Sampled by: [Signature]  
Printed Name: Frank A Clive

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.
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TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N

MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
<u>Sewer</u>	<u>9303103-01</u>
<u>Top Blank</u>	<u>↓ -02</u>

Sewer #2 3/2 ✓ 2

TVB 2 ✓ 1

Relinquished by (signature): <u>[Signature]</u>	Printed Name: <u>Frank A Clive</u>	Date: <u>3-2-93</u> Time: <u>19:18</u>	Received (signature): <u>[Signature]</u>	Printed Name: _____	Date: _____ Time: _____
Relinquished by (signature): _____	Printed Name: _____	Date: _____ Time: _____	Received (signature): _____	Printed Name: _____	Date: _____ Time: _____
Relinquished by (signature): _____	Printed Name: _____	Date: _____ Time: _____	Received (signature): <u>[Signature]</u>	Printed Name: <u>Rhonda Injejicinn</u>	Date: <u>3-2-93</u> Time: <u>1918</u>

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



# SEQUOIA ANALYTICAL

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MAR 2 1993

Gettler Ryan  
2150 W. Winton Avenue  
Hayward, CA 94545  
Attention: Bob Lauritzen

GETTLER-RYAN, INC.  
CONSTRUCTION

Project: 2850.02, Shell - Oakland

Enclosed are the results from 1 water sample received at Sequoia Analytical on February 25, 1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3BB9701	Water, SS-1	2/25/93	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

Nokowhat D. Herrera  
Project Manager

After  
Replacement



# SEQUOIA ANALYTICAL

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

Gettler Ryan  
2150 W. Winton Avenue  
Hayward, CA 94545  
Attention: Bob Lauritzen

Client Project ID: 2850.02, Shell - Oakland  
Sample Matrix: Water  
Analysis Method: EPA 5030/8015/8020  
First Sample #: 3BB9701

Sampled: Feb 25, 1993  
Received: Feb 25, 1993  
Reported: Feb 26, 1993

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/L	Sample I.D. 3BB9701 SS-1	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Purgeable Hydrocarbons	0.050	0.087					
Benzene	0.00050	0.0056					
Toluene	0.00050	0.0078					
Ethyl Benzene	0.00050	0.0021					
Total Xylenes	0.00050	0.015					

Chromatogram Pattern: Gas

### Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	2/25/93
Instrument Identification:	GCHP-7
Surrogate Recovery, %: (QC Limits = 70-130%)	95

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

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
Project Manager



# SEQUOIA ANALYTICAL

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

Gettler Ryan  
2150 W. Winton Avenue  
Hayward, CA 94545  
Attention: Bob Lauritzen

Client Project ID: 2850.02, Shell - Oakland

QC Sample Group: 3BB9701

Reported: Feb 26, 1993

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	B.Ali	B.Ali	B.Ali	B.Ali
Reporting Units:	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Feb 25, 1993	Feb 25, 1993	Feb 25, 1993	Feb 25, 1993
QC Sample #:	G3BB2402	G3BB2402	G3BB2402	G3BB2402
Sample Conc.:	0.0072	N.D.	N.D.	N.D.
Spike Conc. Added:	0.010	0.010	0.010	0.030
Conc. Matrix Spike:	0.017	0.011	0.011	0.034
Matrix Spike % Recovery:	98	110	110	113
Conc. Matrix Spike Dup.:	0.019	0.012	0.012	0.038
Matrix Spike Duplicate % Recovery:	120	120	120	130
Relative % Difference:	11	8.7	8.7	11

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
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: 2-25-93

Page 1 of 1

Site Address: 5755 Broadway  
Oakland CA

WIC#: 204-

Shell Engineer: Rob McLaren  
Phone No.:  
Fax #:

Consultant Name & Address:  
Getter-Ryan Inc. - 2150 W. Winton Ave. Hayward, CA 94545

Consultant Contact: Bob Loufiza Jeff Ryan  
Phone No.: (510) 352-4800  
Fax #: 783-1089

Comments: OK # 2850.02  
783-7500

Sampled by: *[Signature]*  
Printed Name: Frank A Cline

**Analysis Required**

TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N

LAB: BEQ

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring <input type="checkbox"/>	4461	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	4441	48 hours <input type="checkbox"/>
Soil Classify/Disposal <input type="checkbox"/>	4442	15 days <input type="checkbox"/> (Normal)
Water Classify/Disposal <input type="checkbox"/>	4443	Other <input checked="" type="checkbox"/>
Soil/Air Rem. or Sys. O & M <input type="checkbox"/>	4452	
Water Rem. or Sys. O & M <input type="checkbox"/>	4453	
Other <input checked="" type="checkbox"/>		

NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT  
Call Jeff Ryan ASAP 226 92

UST AGENCY: \_\_\_\_\_

Sample ID	Date	Sludge	Soil	Water	Air	No. of confs.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SS #1	2/25			X		2											GW/GAS	

Relinquished By (signature): <i>[Signature]</i>	Printed Name: Frank A Cline	Date: 2-25-93	Received (signature): _____	Printed Name: _____	Date: _____
Relinquished By (signature): _____	Printed Name: _____	Date: _____	Received (signature): _____	Printed Name: _____	Date: _____
Relinquished By (signature): _____	Printed Name: _____	Date: _____	Received (signature): <i>[Signature]</i>	Printed Name: Khonda Trijejikian	Date: 2-25-93

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



# SEQUOIA ANALYTICAL

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JAN 13 1993

GETTLER-RYAN INC.  
GENERAL CONTRACTORS

Gettler Ryan  
2150 W. Winton Avenue  
Hayward, CA 94545  
Attention: Bob Herron

Project: 2850.01, Shell - Oakland

Enclosed are the results from 2 water samples received at Sequoia Analytical on January 13, 1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3011502	Water, Sewer	1/13/93	EPA 5030/8015/8020
3011503	Water, Trip Blank	1/13/93	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

Nokowhat D. Herrera  
Project Manager

*Betre  
Replemunt*

2850.01-B  
REPORT.XLS <1>



# SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063  
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Gettler Ryan  
2150 W. Winton Avenue  
Hayward, CA 94545  
Attention: Bob Herron

Client Project ID: 2850.01, Shell - Oakland  
Sample Matrix: Water  
Analysis Method: EPA 5030/8015/8020  
First Sample #: 301-1502

Sampled: Jan 13, 1993  
Received: Jan 13, 1993  
Reported: Jan 15, 1993

## TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 301-1502 Sewer	Sample I.D. 301-1503 Trip Blank	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Purgeable Hydrocarbons	50	2,000	N.D.				
Benzene	0.50	150	N.D.				
Toluene	0.50	310	N.D.				
Ethyl Benzene	0.50	31	N.D.				
Total Xylenes	0.50	380	N.D.				
Chromatogram Pattern:		Gas	--				

### Quality Control Data

Report Limit		
Multiplication Factor:	20	1.0
Date Analyzed:	1/13/93	1/13/93
Instrument Identification:	GCHP-3	GCHP-3
Surrogate Recovery, %: (QC Limits = 70-130%)	107	96

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

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
Project Manager



# SEQUOIA ANALYTICAL

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Gettler Ryan  
2150 W. Winton Avenue  
Hayward, CA 94545  
Attention: Bob Herron

Client Project ID: 2850.01, Shell - Oakland

QC Sample Group: 3011502 - 03

Reported: Jan 15, 1993

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	M.Nipp	M.Nipp	M.Nipp	M.Nipp
Reporting Units:	µg/L	µg/L	µg/L	µg/L
Date Analyzed:	Jan 13, 1993	Jan 13, 1993	Jan 13, 1993	Jan 13, 1993
QC Sample #:	3011265A	3011265A	3011265A	3011265A
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30
Conc. Matrix Spike:	9.6	9.3	9.9	28
Matrix Spike % Recovery:	96	93	99	93
Conc. Matrix Spike Dup.:	8.2	8.0	8.5	24
Matrix Spike Duplicate % Recovery:	82	80	85	80
Relative % Difference:	16	15	15	15

SEQUOIA ANALYTICAL

Nokowhat D. Herrera  
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: 5755 Broadway

WIC#: 204-5510-0303

Shell Engineers: Ray Newsome Phone No. 685-3850  
Fax #: (510) 685-3943

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

Consultant Contact: Danni's Gar Phone No. 783-7500  
Fax #: 783-1089

Comments: Job # 2850.01

Sampled By: Bob Herron  
Printed Name: Bob Herron

**Analysis Required**

COPY

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

LAB: SEQ

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input checked="" type="checkbox"/>
Site Investigation <input checked="" type="checkbox"/>	5441	48 hours <input type="checkbox"/>
Soil for disposal <input type="checkbox"/>	5442	15 days <input type="checkbox"/> (Maximal)
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 conts.	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
Sewer	1-13-93		✓		2	X					40ml	✓		Run off water	3011502
Trip			✓		1	X					40ml	✓			↓ 03

Relinquished By (signature): <u>Bob Herron</u>	Printed name: <u>Bob Herron</u>	Date: <u>1-13-93</u>	Time: <u>1532</u>	Received (signature): <u>Rhonda Injejik</u>	Printed name: <u>Rhonda Injejik</u>	Date: <u>1-13-93</u>	Time: <u>1532</u>
Relinquished By (signature):	Printed name:	Date:	Time:	Received (signature):	Printed name:	Date:	Time:
Relinquished By (signature):	Printed name:	Date:	Time:	Received (signature):	Printed name:	Date:	Time:

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