file in R folder

GeoStrategies Inc.
2140 WEST WINTON AVENUE
HAYWARD, CALIFORNIA 94545
(510) 352-4800

FACSIMILE COVER SHEET

TO: Barney Chan
COMPANY: Alameda County Health Agency
FROM: Clycle Galantine
DATE: 2-24-92
RE: Shell 285 Hegenberger Rd Oakland
COMMENTS: Results from analysis

16 pages including cover.

If there are any problems with this transmission, please call (510) 352-4800.

From removal of 3 hydraulic lifts & the oil/grease separator

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: 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) 364-9600 • FAX (415) 364-9233

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)
[redacted]	[redacted]	[redacted]

1900 mg/kg

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

2022160.GET <1>

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

Gettler Ryan	Client Project ID:	7662.01, Shell, Oakland	Sampled:	Feb 12, 1992
2150 W. Winton Avenue	Matrix Descript:	Water	Received:	Feb 13, 1992
Hayward, CA 94545	Analysis Method:	EPA 3510/8015	Extracted:	Feb 14, 1992
Attention: John Zwierzycki	First Sample #:	202-2158	Analyzed:	Feb 16, 1992
			Reported:	Feb 19, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

TPH d

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

in water

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.

2022160.GET <2>

SEQUOIA ANALYTICAL

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Gettler Ryan	Client Project ID:	7662.01, Shell, Oakland	Sampled: Feb 12, 1992
2150 W. Winton Avenue	Matrix Descript:	Soil	Received: Feb 13, 1992
Hayward, CA 94545	Analysis Method:	EPA 3550/8015	Extracted: Feb 14, 1992
Attention: John Zwierzycki	First Sample #:	202-2160	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	SCW-1	400
202-2161	SL-3	1,100

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

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.

202160.GET <3>

SEQUOIA ANALYTICAL

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

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.

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

2022150.GET <4>

SEQUOIA ANALYTICAL

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

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

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
202-2160	SDW-1	630
202-2161	SL-3	15,000

Detection Limits:	30

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

2022160.GET <5>

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
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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				
Attention: John Zwierzycki	Lab Number:	202-2160	Analyzed:	Feb 18, 1992
			Reported:	Feb 19, 1992

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium	0.50	N.D.

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

2022160.GET <6>

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

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 8240	Analyzed:	Feb 15, 1992
Attention: John Zwierzycki	Lab Number:	201-2160	Reported:	Feb 19, 1992

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Acetone	5.0	N.D.
[illegible]	[illegible]	[illegible]
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.
[illegible]	[illegible]	[illegible]
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.
[illegible]	[illegible]	[illegible]

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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

2022160.GET <7>

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: John Zwierzycki

Client Project ID: 7662.01, 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. Maralit	A. Maralit	A. Maralit	A. Maralit
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

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

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

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: John Zwierzycki

Client Project ID: 7682.01, Shell, Oakland
QC Sample Group: 2022158-9
Reported: Feb 19, 1992

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:	250	55
Matrix Spike % Recovery:	83	92
Conc. Matrix Spike Dup.:	220	54
Matrix Spike Duplicate % Recovery:	73	90
Relative % Difference:	13	1.8

SEQUOIA ANALYTICAL

Vickie Tague
Project Manager

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

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

2022160.GET <9>

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: John Zwierzycki

Client Project ID: 7692.01, 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 5520 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 Spike:	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

Vickie Tague
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

2022160.GET <10>

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: John Zwierzycki

Client Project ID: 7682.01, Shell, Oakland
QC Sample Group: 202-2160

Reported: Feb 19, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Cadmium	Nickel	Chromium	Lead	Zinc
				010	EPA 6010
				rma	R. Sharma
Rep				kg	mg/kg
Da				1992	Feb 18, 1992
Q				160	202-2160
San				I	27
Sp				0	50
Cc				6	74
M %				0	94
C S				59	76
1 %				96	98
%				5.2	2.7

John Wolfe
(510) 352-4800
x 227

S	I.S. - Conc. of Sample / e Conc. Added	x 100
	S. - Conc. of M.S.D. / . + Conc. of M.S.D.) / 2	x 100

Vickie Tague
Project Manager

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

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

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

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

2022160.GET <12>

SHELL OIL COMPANY
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: _____

Date:
Page 1 of 1

Site Address: 285 Hegenberger Rd Oakland

WIC#: 204-5508-5504

Shell Engineer: Dan Kirk
Phone No. (510) 685-3850
Fax #: 685-3943

Consultant Name & Address: Gettler-Ryan / GeoStrategies
2150 W. Winton Ave.
Hayward, California 94545
7682.01

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

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring ☐	5461
Site Investigation ☒	5441
Soil for disposal ☐	5442
Water for disposal ☐	5443
Air Sample- Sys O&M ☐	5452
Water Sample - Sys O&M ☐	5453
Other ☐	

TURN AROUND TIME
24 hours ☐
48 hours ☒
15 days ☐ (Normal)
Other ☐ _____
NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.

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	Oil & Grease - 5520 E&F or C&F	TCAP 5 Metal			Container Size	Preparation Used	Composite 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	V					N	2022160	
												w/ pH							

Relinquished By (signature):	Printed name: Clyde Galantine	Date: 2/13/92	Received (signature):	Printed name: A-NAGRA	Date: 2/13/92
		Time: 1621			Time: 1622
Relinquished By (signature):	Printed name:	Date:	Received (signature):	Printed name:	Date:
		Time:			Time:
Relinquished By (signature):	Printed name:	Date:	Received (signature):	Printed name:	Date:
		Time:			Time:

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

Last Revision Date: 10/15/91