



GeoStrategies Inc.

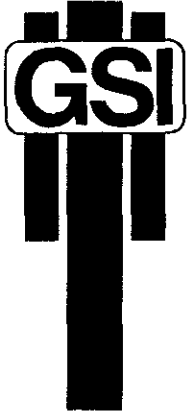
STP 4B

SOIL SAMPLING AND EXCAVATION REPORT

Former Shell Service Station
2800 Telegraph Avenue
Berkeley, California
WIC# 204-5508-2303

761005-21

November 30, 1992



GeoStrategies Inc.

November 30, 1992

Shell Oil Company
P.O. Box 4023
Concord, California 94520

Attn: Mr. Stan Roller

Re: SOIL SAMPLING AND EXCAVATION REPORT
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California
WIC #204-5508-2303

Mr. Roller:

This Soil Sampling and Excavation Report summarizes field activities performed by GeoStrategies Inc. (GSI) during the removal of three hydraulic lifts and one oil/water separator at the above referenced site (Plate 1). Excavation and demolition activities were performed by Armer-Norman Inc. of Walnut Creek, California. Backfilling, compaction and soil disposal activities were performed by Gettler-Ryan Inc. of Hayward, California. A GSI geologist was present on-site to observe the removal work, and to obtain soil samples from the excavations and related soil stockpiles. A description of field procedures and sampling results are discussed in this report.

SITE DESCRIPTION, OBSERVATIONS AND RESULTS

The site was previously occupied by a Shell Service Station and is currently vacant. The underground storage tanks, product lines, dispenser islands and service station building were previously removed. The three hydraulic lifts and a 2-compartment oil/water separator remained after the initial site demolition. The hydraulic lifts and oil/water separator were located in the former service station building in the northeast corner of the site (Plate 2). This equipment was removed on June 18, 1992 and witnessed by a representative from the Alameda County Health Agency (ACHA). The three hydraulic lifts and oil/water separator appeared to be in good condition with no visible cracks or holes.

761005-21

GeoStrategies Inc.

Shell Oil Company
November 30, 1992
Page 2

Field Methods and Procedures

Soil samples were collected by pushing or hammering a clean stainless steel sample tube into the soil until completely filled. The tube was removed, covered at both ends with teflon tape and sealed with plastic end caps. The sample was then labeled, placed in a cooler with blue ice, entered on a chain-of-custody form and transported to Sequoia Analytical Laboratory, a State-certified laboratory located in Redwood City, California.

Soil samples from the hydraulic lifts and oil/water separator were collected with a backhoe bucket. The top 1 to 3 inches of soil was removed, then the sample was collected as described above.

Soil stockpile samples were collected by removing the top 6 to 12 inches of soil, then collecting the sample as described above.

The groundwater sample was collected using a clean, disposable, acrylic bailer to obtain the sample from the excavation. The groundwater was poured into four 1-liter glass bottles and three 40-milliliter glass vials and sealed with teflon-lined caps. The containers were inspected to insure that no air bubble were present. The sample was then handled as described above.

Product Piping

Soil samples ST-1 through ST-4 were collected from below the product piping at the dispenser islands at a depth of approximately 3 feet below grade. The samples were analyzed for TPH-Gasoline, BTEX and total lead.

TPH-Gasoline and BTEX were reported as ND for each sample. Total lead concentrations ranged from ND to 13 ppm. Sample locations are shown on Plate 3 and chemical analytical data are summarized in Table 1.

GeoStrategies Inc.

Shell Oil Company
November 30, 1992
Page 3

Oil/Water Separator

Soil sample SOW-1 was collected from the bottom of the oil/water separator excavation at a depth of approximately 5.5 feet below grade. The sample was analyzed for TPH-Diesel, TPH-Oil, Total Petroleum Hydrocarbons calculated as Gasoline (TPH-Gasoline) according to EPA Method 8015 (Modified), benzene, toluene, ethylbenzene and xylenes (BTEX) according to EPA Method 8020, Oil and Grease (O&G) according to ASTM Method 5520 E&F, Chlorinated Solvents (CL HC) according to EPA Method 8240 and ICAP metals according to EPA Method 6010.

TPH-Gasoline, TPH-Diesel, TPH-Oil and BTEX were reported as ND. The sample contained 68 ppm O&G and 5.1 ppm total lead. The sample location is shown on Plate 3 and chemical analytical data are summarized in Table 1.

Hydraulic Lifts

Soil samples SL-1, SL-2 and SL-3 were collected from the bottom of each excavation at depths of approximately 7.5, 8 and 8 feet, respectively. The samples were analyzed for Total Petroleum Hydrocarbons calculated as Diesel (TPH-Diesel) and Motor Oil (TPH-Oil) according to EPA Method 8015 (Modified).

TPH-Diesel and TPH-Oil were reported as not detected (ND) for samples SL-2 and SL-3. Sample SL-1 contained 40 parts per million (ppm) TPH-Diesel and 580 ppm TPH-Oil. Sample locations are shown on Plate 3 and chemical analytical data are summarized in Table 1.

Product Piping Soil Stockpile

Approximately 8 cubic yards of soil was removed from the product piping excavations and stockpiled near the center of the site (Plate 3). Soil sample SS-1A-B was collected from the stockpile. The sample was composed of two subsamples that were composited in the laboratory. The sample was analyzed for TPH-Gasoline, BTEX and organic lead according to the LUFT manual guidelines.

TPH-Gasoline, BTEX and organic lead were reported as ND for the sample. Chemical analytical data are summarized in Table 1.

GeoStrategies Inc.

Shell Oil Company
November 30, 1992
Page 4

Hydraulic Lift and Oil/Water Separator Soil Stockpile

Approximately 50 cubic yards of soil was removed from the hydraulic lift and oil/water separator excavations and stockpiled south of the excavations (Plate 3). Soil sample SWS-1A-D was collected from the stockpile. The sample was composed of four subsamples that were composited at the laboratory. The sample was analyzed for TPH-Gasoline, TPH-Diesel, BTEX, O&G and CL HC.

TPH-Gasoline and benzene were reported as ND. The sample contained 11 ppm TPH-Diesel and 260 ppm O&G. Chemical analytical data are summarized in Table 1.

OVEREXCAVATIONS

First Stage Overexcavation

Upon receipt of the chemical data, the area around samples SL-1 and SOW-1 were overexcavated. On July 10, 1992, a 7-foot by 7-foot excavation was dug around the original samples. Samples SL-1X and SOW-1X were collected at depths of approximately 10 feet and 8.5 feet below grade, respectively (Plate 3).

Sample SL-1X was analyzed for TPH-Oil and TPH-Diesel. Sample SOW-1X was analyzed for TPH-Gasoline, TPH-Diesel, BTEX, O&G, CL HC and ICAP metals.

Sample SL-1X contained 27 ppm TPH-Diesel and 340 ppm TPH-Oil. Sample SOW-1X contained 6.4 ppm TPH-Gasoline, 1.2 ppm TPH-Diesel and 59 ppm O&G, and was ND for BTEX and total lead. Chemical analytical data are summarized in Table 1.

In addition, soil stockpile sample SWS-2A-D was collected and analyzed for chemicals as per local sanitary landfill requirements for disposal.

Second Stage Overexcavation

Upon receipt of the chemical data for samples SL-1X and SOW-1X, additional overexcavation was initiated. The excavation was enlarged to 18 feet by 9 feet by 11.5 feet deep on August 18, 1992.

GeoStrategies Inc.

Shell Oil Company
November 30, 1992
Page 5

Soil samples SL-1Y and SOW-1Y were collected at a depth of approximately 10.5 feet below grade. In addition, groundwater sample SH-1 was collected at approximately 11.5 feet below grade. Sample locations are shown on Plate 3 and sample depths are shown in Table 3.

Sample SL-1Y was analyzed for TPH-Diesel and TPH-Oil. Samples SOW-1Y and SH-1 were analyzed for TPH-Gasoline, TPH-Diesel, BTEX and O&G. Sample SOW-1Y was also analyzed for CL HC and ICAP metals.

Samples SL-1Y and SOW-1Y were ND for all analyses. Groundwater sample SH-1 contained 0.11 ppm TPH-Gasoline and was ND for BTEX, TPH-Diesel and O&G. Chemical analytical are summarized in Table 1.

Approximately 40 cubic yards of soil generated by the second stage of overexcavation was stockpiled on-site (Plate 3). Sample SWS-3A-D was collected from the stockpile and was analyzed for TPH-Gasoline, TPH-Diesel, BTEX and O&G.

Sample SWS-3A-D contained 1.4 ppm TPH-Diesel, 98 ppm O&G and was ND for TPH-Gasoline and BTEX. Chemical analytical data are summarized in Table 1.

SOIL STOCKPILE DISPOSITION

Upon receipt of the chemical analytical data, the stockpiles were transported to the appropriate facility. Sample SS-1A-D was used to backfill the excavations dug in collecting samples ST-1 through ST-4.

Approximately 90 cubic yards of soil represented by samples SWS-1A-D through SWS-3A-D were transported to the Browning-Ferris Industries Landfill located in Livermore, California.

SITE DISPOSITION

Upon completion of the overexcavation, the excavations on-site were backfilled and compacted by Gettler-Ryan Inc. of Hayward, California.

GeoStrategies Inc.

Shell Oil Company
November 30, 1992
Page 6

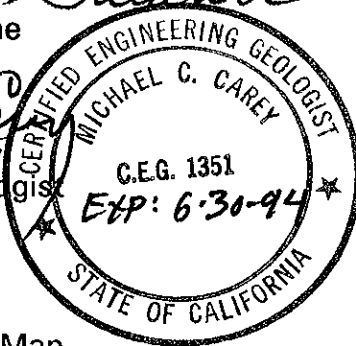
If you have any questions, please call.

GeoStrategies Inc. by

Clyde J. Galantine

Clyde J. Galantine
Geologist

Michael C. Carey
Michael C. Carey
Engineering Geologist
C.E.G 1351



CJG/MCC/rmt

Plate 1. Vicinity Map
Plate 2. Site Plan
Plate 3. Sampling and Stockpile Map

Appendix A: Analytical Laboratory Report and Chain-of-Custody

QC Review: *QJ*

TABLE 1

CHEMICAL ANALYTICAL DATA SUMMARY
Soil and Ground-Water

SAMPLE NO	DEPTH (feet)	SAMPLE DATE	ANALYSIS DATE	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)	TPH-DIESEL (PPM)	TPH-O (PPM)	OIL & GREASE (PPM)	TOTAL LEAD (PPM)	ORGANIC LEAD (PPM)
ST-1	3	18-Jun-92	22-Jun-92	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	----	----	----	<5.0	----
ST-2	3	18-Jun-92	22-Jun-92	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	----	----	----	13	----
ST-3	3	18-Jun-92	22-Jun-92	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	----	----	----	6.2	----
ST-4	3	18-Jun-92	22-Jun-92	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	----	----	----	7.7	----
SOW-1	5.5	18-Jun-92	22-Jun-92	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	68	5.1	----
SOW-1X	10	09-Jul-92	14-Jul-92	*6.4	<0.0050	<0.0050	<0.0050	<0.0050	1.2	----	59	<5.0	----
SOW-1Y	10.5	18-Aug-92	20-Aug-92	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	----	<50	----	----
SL-1	7.5	18-Aug-92	25-Jun-92	----	----	----	----	----	40	580	----	----	----
SL-1X	10	09-Jul-92	14-Jul-92	----	----	----	----	----	**27	340	----	----	----
SL-1Y	10.5	18-Aug-92	20-Aug-92	----	----	----	----	----	<1.0	<1.0	----	----	----
SL-2	8	18-Jun-92	25-Jun-92	----	----	----	----	----	<1.0	<1.0	----	----	----
SL-3	8	18-Jun-92	25-Jun-92	----	----	----	----	----	<1.0	<1.0	----	----	----
SS-1A-D		18-Jun-92	24-Jun-92	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	----	----	----	----	<0.050
SWS-1A-D		18-Jun-92	24-Jun-92	<1.0	<0.0050	<0.0050	<0.0050	0.006	11	----	260	----	----
SWS-2A-D		09-Jul-92	14-Jul-92	----	----	----	----	----	----	520	----	----	----
SWS-3A-D		18-Aug-92	20-Aug-92	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	1.4	----	98	----	----
SH-1	11.5	18-Aug-92	20-Aug-92	0.11	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	----	<5.0	----	----

TPH-G = Total Petroleum Hydrocarbons calculated as Gasoline.

TPH-D = Total Petroleum Hydrocarbons calculated as Diesel.

TPH-O = Total Petroleum Hydrocarbons calculated as Motor Oil.

PPM = Parts Per Million.

ST = Trench Sample.

SS = Stockpile Sample.

TABLE 1

CHEMICAL ANALYTICAL DATA SUMMARY
Soil and Ground-Water

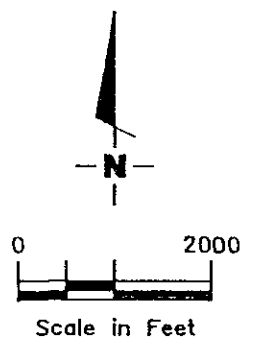
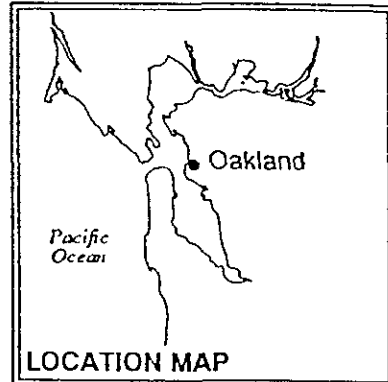
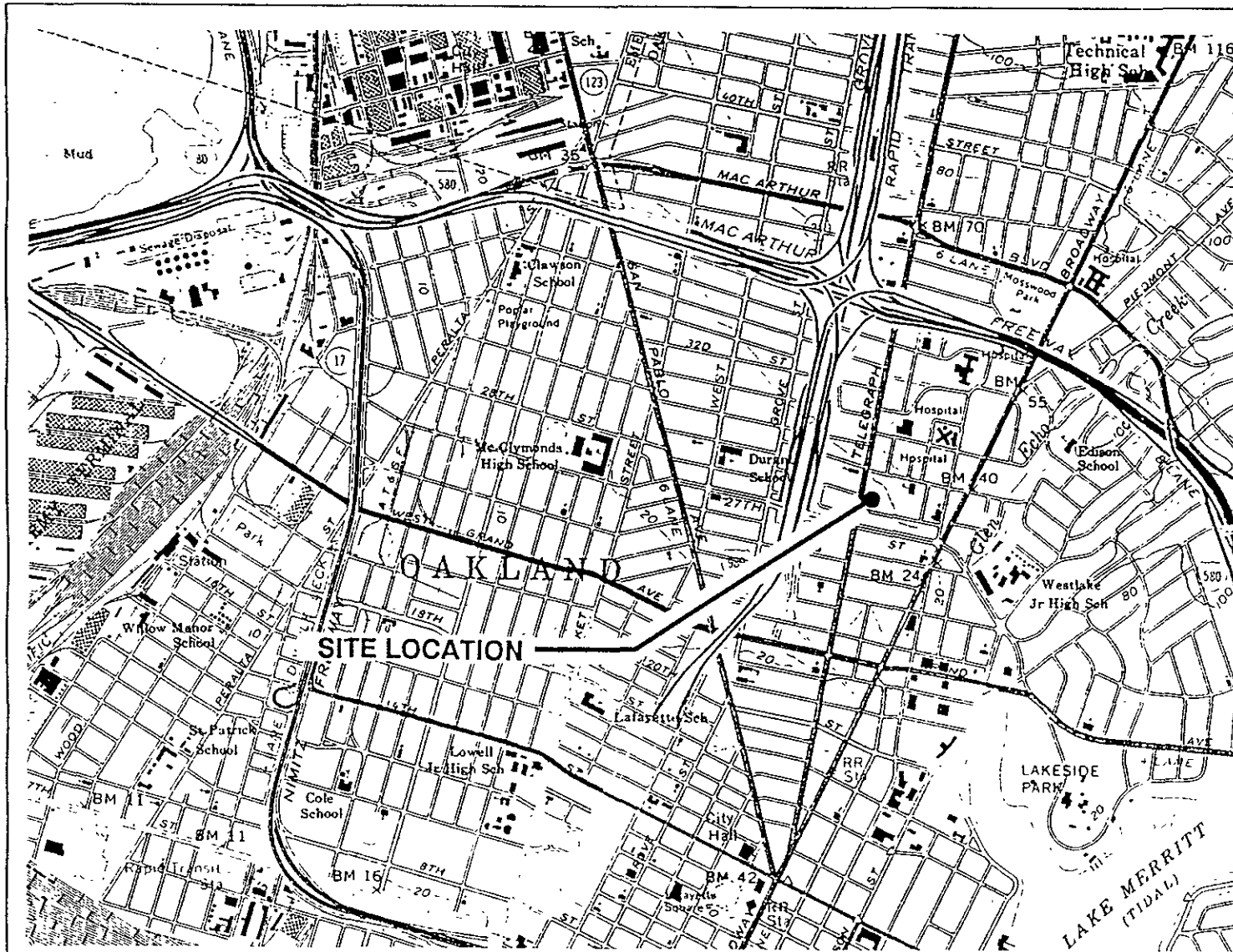
SAMPLE NO	DEPTH (feet)	SAMPLE DATE	ANALYSIS DATE	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPH)	TPH-DIESEL (PPM)	TPH-O (PPH)	OIL & GREASE (PPM)	TOTAL LEAD (PPM)	ORGANIC LEAD (PPH)
-----------	--------------	-------------	---------------	-------------	---------------	---------------	--------------------	---------------	------------------	-------------	--------------------	------------------	--------------------

SOW = Oil/Water Separator Sample.
 SL = Hydraulic Lift Sample.
 SWS = Waste Oil Soil Composite Sample.
 SH = Ground-Water Sample.

* = Non-Gasoline Mix >C8
 ** = Non-Diesel Mix C9-C13 and >C17

GeoStrategies Inc.

ILLUSTRATIONS



Base Map: USGS Topographic Map



GeoStrategies Inc.

VICINITY MAP
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California

PLATE

1

JOB NUMBER
7610

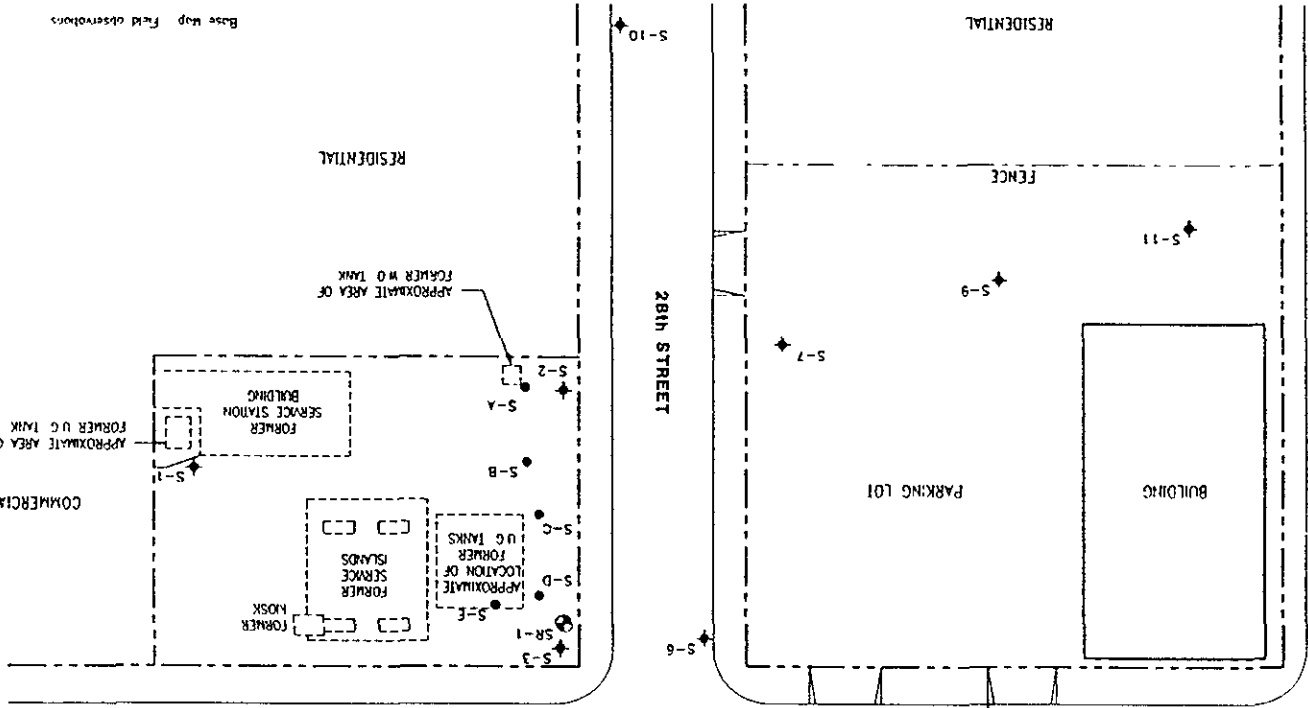
REVIEWED BY

DATE
3/91

REVISED DATE

27th STREET

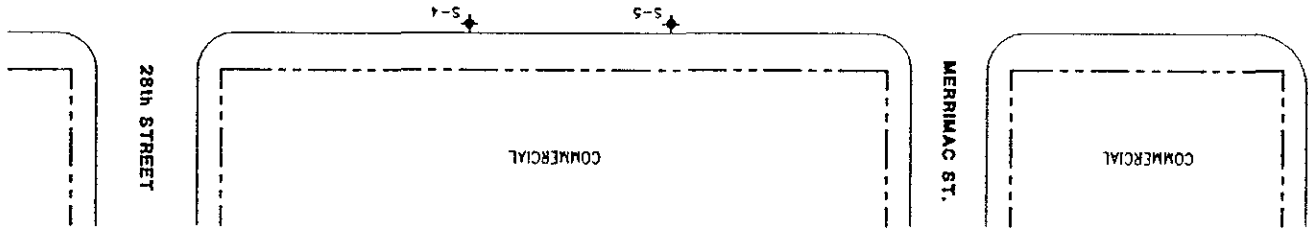
28th STREET



TELEGRAPH AVENUE

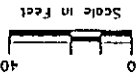
28th STREET

MERRIMAC ST.



EXPLANATION

- ◆ Ground-water monitoring well
- ⊙ Ground-water recovery well
- Soil boring



Base map: Field observations



GeoStrategies Inc.

REVISED BY

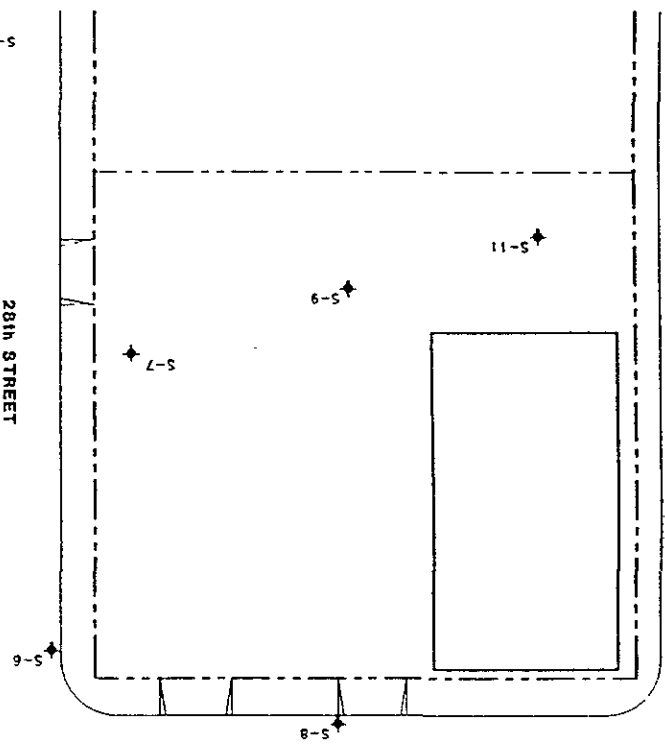
JOB NUMBER
761005-21

SITE PLAN
 Former Shell Service Station
 2800 Telegraph Avenue
 Oakland, California

DATE
9/92

REVISED DATE

27th STREET

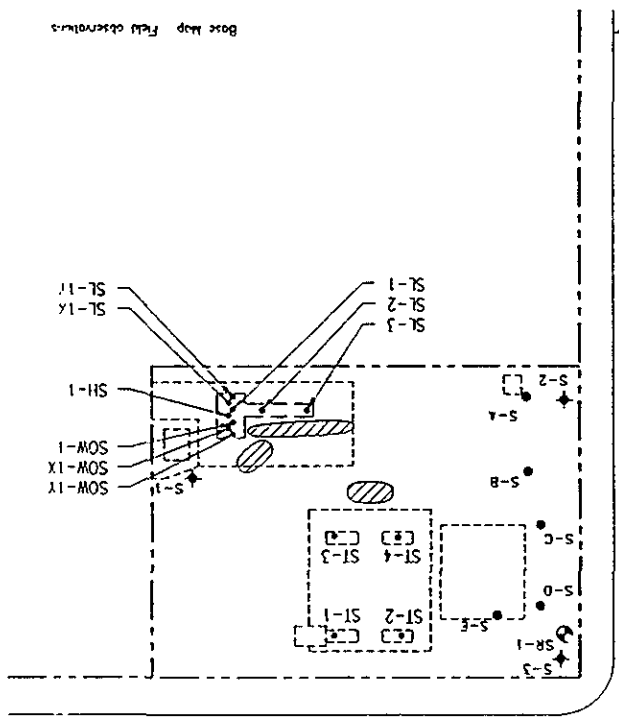


28th STREET

TELEGRAPH AVENUE

MERRIMAC ST.

28th STREET



Base Map Field observations

- EXPLANATION**
- ◆ Ground-water monitoring well
 - Ground-water recovery well
 - Soil boring
 - ST Trench sample
 - SL Hydraulic lift sample
 - SOW Oil/water separator sample
 - SH Groundwater sample
 - Trench
 - ▨ Stockpile



GeoStrategies Inc.

JOB NUMBER
761005-21

PROJECT #
C76

DATE
9/92

REVISION DATE

SAMPLING and STOCKPILE MAP
Former Shell Service Station
2800 Telegraph Avenue
Oakland, California

GeoStrategies Inc.

APPENDIX A
LABORATORY ANALYTICAL REPORT
AND CHAIN-OF-CUSTODY FORM



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: Clyde Galantine

Project: 7610.05, Shell, Oakland

Enclosed are the results from 11 soil samples received at Sequoia Analytical on June 18, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2063533	Soil, ST-1	6/18/92	EPA 5030/8015/8020 Lead
2063534	Soil, ST-2	6/18/92	EPA 5030/8015/8020 Lead
2063535	Soil, ST-3	6/18/92	EPA 5030/8015/8020 Lead
2063536	Soil, ST-4	6/18/92	EPA 5030/8015/8020 Lead
2063537	Soil, SL-1	6/18/92	EPA 3550/8015 EPA 3550/8015 as Motor Oil
2063538	Soil, SL-2	6/18/92	EPA 3550/8015 as Motor Oil EPA 3550/8015
2063539	Soil, SL-3	6/18/92	EPA 3550/8015 as Motor Oil EPA 3550/8015
2063540	Soil, SOW-1	6/18/92	Cd, Cr, Ni, pb, Zn EPA 3550/8015 as Motor Oil EPA 5030/8015/8020 EPA 8240 SM 5520 E&F (Gravimetric) EPA 3550/8015

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



SEQUOIA ANALYTICAL

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

Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jun 18, 1992
2150 W. Winton Avenue	Matrix Descript: Soil	Received: Jun 18, 1992
Hayward, CA 94545	Analysis Method: EPA 5030/8015/8020	Analyzed: Jun 22, 1992
Attention: Clyde Galantine	First Sample #: 206-3533	Reported: Jun 29, 1992

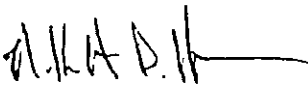
TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons			Ethyl Benzene Xylenes	
		mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
206-3533	ST-1	N.D.	N.D.	N.D.	N.D.	N.D.
206-3534	ST-2	N.D.	N.D.	N.D.	N.D.	N.D.
206-3535	ST-3	N.D.	N.D.	N.D.	N.D.	N.D.
206-3536	ST-4	N.D.	N.D.	N.D.	N.D.	N.D.
206-3540	SOW-1	N.D.	N.D.	N.D.	N.D.	N.D.

Detection Limits:	1.0	0.0050	0.0050	0.0050	0.0050
--------------------------	------------	---------------	---------------	---------------	---------------

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.

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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Sample Descript: Soil
Analysis for: Lead
First Sample #: 206-3533

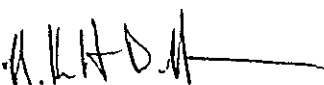
Sampled: Jun 18, 1992
Received: Jun 18, 1992
Extracted: Jun 23, 1992
Analyzed: Jun 24, 1992
Reported: Jun 29, 1992

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg
206-3533	ST-1	5.0	N.D.
206-3534	ST-2	5.0	13
206-3535	ST-3	5.0	6.2
206-3536	ST-4	5.0	7.7

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

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jun 18, 1992
2150 W. Winton Avenue	Matrix Descript: Soil	Received: Jun 18, 1992
Hayward, CA 94545	Analysis Method: EPA 3550/8015	Extracted: Jun 23, 1992
Attention: Clyde Galantine	First Sample #: 206-3537	Analyzed: Jun 24, 1992
		Reported: Jun 29, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
206-3537	SL-1	40
206-3538	SL-2	N.D.
206-3539	SL-3	N.D.
206-3540	SOW-1	N.D.

Detection Limits:

1.0

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

Nokowhat D. Herrera
Project Manager



SEQUOIA ANALYTICAL

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

Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jun 18, 1992
2150 W. Winton Avenue	Matrix Descript: Soil	Received: Jun 18, 1992
Hayward, CA 94545	Analysis Method: EPA 3550/8015	Extracted: Jun 23, 1992
Attention: Clyde Galantine	First Sample #: 206-3537	Analyzed: Jun 25, 1992
		Reported: Jun 29, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015) as Motor Oil

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
206-3537	SL-1	580

Detection Limits:

10

High Boiling Point Hydrocarbons are quantitated against a motor oil 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

Nokowhat D. Herrera
Project Manager

2063533.GET <4>



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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Matrix Descript: Soil
Analysis Method: EPA 3550/8015
First Sample #: 206-3538

Sampled: Jun 18, 1992
Received: Jun 18, 1992
Extracted: Jun 23, 1992
Analyzed: Jun 25, 1992
Reported: Jun 29, 1992

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015) as Motor Oil

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
206-3538	SL-2	N.D.
206-3539	SL-3	N.D.
206-3540	SOW-1	N.D.

Detection Limits:

1.0

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

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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Sample Descript: Soil, SOW-1
Analysis Method: EPA 8240
Lab Number: 206-3540

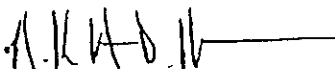
Sampled: Jun 18, 1992
Received: Jun 18, 1992
Analyzed: Jun 23, 1992
Reported: Jun 29, 1992

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Acetone.....	0.50	N.D.
Benzene.....	0.10	N.D.
Bromodichloromethane.....	0.10	N.D.
Bromoform.....	0.10	N.D.
Bromomethane.....	0.10	N.D.
2-Butanone.....	0.50	N.D.
Carbon disulfide.....	0.10	N.D.
Carbon tetrachloride.....	0.10	N.D.
Chlorobenzene.....	0.10	N.D.
Chloroethane.....	0.10	N.D.
2-Chloroethyl vinyl ether.....	0.50	N.D.
Chloroform.....	0.10	N.D.
Chloromethane.....	0.10	N.D.
Dibromochloromethane.....	0.10	N.D.
1,1-Dichloroethane.....	0.10	N.D.
1,2-Dichloroethane.....	0.10	N.D.
1,1-Dichloroethene.....	0.10	N.D.
cis-1,2-Dichloroethene.....	0.10	N.D.
trans-1,2-Dichloroethene.....	0.10	N.D.
1,2-Dichloropropane.....	0.10	N.D.
cis-1,3-Dichloropropene.....	0.10	N.D.
trans-1,3-Dichloropropene.....	0.10	N.D.
Ethylbenzene.....	0.10	N.D.
2-Hexanone.....	0.50	N.D.
Methylene chloride.....	0.25	N.D.
4-Methyl-2-pentanone.....	0.50	N.D.
Styrene.....	0.10	N.D.
1,1,2,2-Tetrachloroethane.....	0.10	N.D.
Tetrachloroethene.....	0.10	N.D.
Toluene.....	0.10	N.D.
1,1,1-Trichloroethane.....	0.10	N.D.
1,1,2-Trichloroethane.....	0.10	N.D.
Trichloroethene.....	0.10	N.D.
Trichlorofluoromethane.....	0.10	N.D.
Vinyl acetate.....	0.10	N.D.
Vinyl chloride.....	0.10	N.D.
Total Xylenes.....	0.10	N.D.

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

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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Matrix Descript: Soil
Analysis Method: SM 5520 E&F (Gravimetric)
First Sample #: 206-3540

Sampled: Jun 18, 1992
Received: Jun 18, 1992
Extracted: Jun 22, 1992
Analyzed: Jun 22, 1992
Reported: Jun 29, 1992

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
---------------	--------------------	--------------------------------

206-3540	SOW-1	68
----------	-------	----

Detection Limits:

30

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

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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Sample Descript: Soil, SOW-1
Lab Number: 206-3540

Sampled: Jun 18, 1992
Received: Jun 18, 1992
Extracted: Jun 23, 1992
Analyzed: Jun 24, 1992
Reported: Jun 29, 1992

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium.....	0.50	N.D.
Chromium.....	0.50	47
Nickel.....	2.5	50
Lead.....	5.0	5.1
Zinc.....	0.50	76

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

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

Client Project ID: 7610.05, Shell, Oakland

Attention: Clyde Galantine

QC Sample Group: 2063533 - 36, 40

Reported: Jun 29, 1992

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/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Jun 22, 1992	Jun 22, 1992	Jun 22, 1992	Jun 22, 1992
QC Sample #:	GBLK062292	GBLK062292	GBLK062292	GBLK062292
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60
Conc. Matrix Spike:	0.19	0.19	0.19	0.56
Matrix Spike % Recovery:	95	95	95	93
Conc. Matrix Spike Dup.:	0.20	0.20	0.19	0.58
Matrix Spike Duplicate % Recovery:	100	100	95	97
Relative % Difference:	5.1	5.1	0.0	3.5

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



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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland

QC Sample Group: 2063537 - 40

Reported: Jun 29, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel
----------------	--------

Method: EPA 8015
 Analyst: M. Tran
 Reporting Units: mg/kg
 Date Analyzed: Jun 25, 1992
 QC Sample #: DBLK062392

Sample Conc.: N.D.

Spike Conc.
Added: 15

Conc. Matrix
Spike: 11

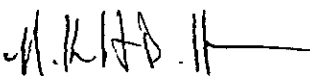
Matrix Spike
% Recovery: 73

Conc. Matrix
Spike Dup.: 11

Matrix Spike
Duplicate
% Recovery: 73

Relative
% Difference: 0.0

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



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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Method (units): EPA 8240 (µg/L purged)
Analyst(s): S.Scott
QC Sample #: BLK062292

Q.C. Sample Dates

Analyzed: Jun 22, 1992
Reported: Jun 29, 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	48	96	48	96	0.0
Trichloroethene	N.D.	50	51	102	51	102	0.0
Benzene	N.D.	50	55	110	54	108	1.8
Toluene	N.D.	50	54	108	54	108	0.0
Chlorobenzene	N.D.	50	54	108	54	108	0.0

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



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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland

QC Sample Group: 206-3540

Reported: Jun 29, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Oil & Grease	Zinc	Nickel	Cadmium	Chromium
Method:	SM5520E&F	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Analyst:	M.Shkidt	C.Medefesser	C.Medefesser	C.Medefesser	C.Medefesser
Reporting Units:	mgkg	mgkg	mgkg	mgkg	mgkg
Date Analyzed:	Jun 22, 1992	Jun 24, 1992	Jun 24, 1992	Jun 24, 1992	Jun 24, 1992
QC Sample #:	BLK062292	206-3536	206-3536	206-3536	206-3536
Sample Conc.:	N.D.	53	40	N.D.	37
Spike Conc. Added:	1000	100	100	100	100
Conc. Matrix Spike:	710	160	140	100	140
Matrix Spike % Recovery:	71	107	100	100	103
Conc. Matrix Spike Dup.:	610	160	140	100	140
Matrix Spike Duplicate % Recovery:	68	107	100	100	103
Relative % Difference:	4.3	0.0	0.0	0.0	0.0

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



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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland

QC Sample Group: 2063537 - 40

Reported: Jun 29, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Lead
---------	------

Method: EPA 6010
 Analyst: C.Medefesser
 Reporting Units: mg/kg
 Date Analyzed: Jun 24, 1992
 QC Sample #: 206-3536

Sample Conc.: 7.7

Spike Conc. Added: 100

Conc. Matrix Spike: 110

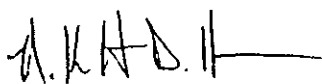
Matrix Spike % Recovery: 102

Conc. Matrix Spike Dup.: 110

Matrix Spike Duplicate % Recovery: 102

Relative % Difference: 0.0

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



Site Address: 2800 Telegraph Ave. Oakland

WICW: 204-5508-2303

Shell Engineer: Stan Roller Phone No. 685-3850
Fax #: (510) 685-3943

Consultant Name & Address: Gettler-Ryan / GeoStrategies
7610.05 2150 W. Winton Ave.
Hayward, California 94545

Consultant Contact: Clyde Galantine Phone No. 783-7500
John Werfal Fax #: 783-1089

Comments: _____

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	Total Pb	ICAP S Metal	TPH-D
X	X	X	X	X	X	X	X	X

LAB: Sequoia

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 conls.	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	Total Pb	ICAP S Metal	TPH-D	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
ST-1	6-18-92	X			1	X	X	X	X	X	X	X	X	X	2 1/4"		N	206	2063S33
ST-2						X	X	X	X	X	X	X	X	X					34
ST-3						X	X	X	X	X	X	X	X	X					35
ST-4						X	X	X	X	X	X	X	X	X					36
SL-1							X						X	X					37
SL-2							X						X	X					38
SL-3							X						X	X					39
SOW-1						X	X	X	X	X	X	X	X	X	2 1/2"				40

Relinquished By (signature): <u>Clyde Galantine</u>	Printed name: <u>Clyde Galantine</u>	Date: <u>6-18-92</u>	Time: <u>3:20</u>	Received (signature): <u>Refrigerator 2</u>	Printed name: _____	Date: <u>6-18-92</u>	Time: <u>3:20</u>
Relinquished By (signature): <u>Refrigerator 2</u>	Printed name: _____	Date: <u>6-18-92</u>	Time: <u>3:50</u>	Received (signature): <u>T. Olive</u>	Printed name: <u>OLIVE</u>	Date: <u>6/18/92</u>	Time: <u>2:55</u>
Relinquished By (signature): <u>T. Olive</u>	Printed name: <u>T. OLIVE</u>	Date: <u>6/18/92</u>	Time: <u>4:30</u>	Received (signature): <u>NGUYEN</u>	Printed name: <u>NGUYEN</u>	Date: <u>6/18</u>	Time: <u>4:30</u>

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



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: Robert Lauritzen

Project: 7610.05, Shell, Oakland

Enclosed are the results from 2 soil samples received at Sequoia Analytical on July 9, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2071378	Soil, SOW-1X	7/9/92	EPA 3550/8015 EPA 8240 SM 5520 E&F (Gravimetric) EPA 5030/8015/8020 Cd,Cr,Pb,Ni,Zn
2071377	Soil, SL-1X	7/9/92	EPA 3550/8015 EPA 3550/8015 as Motor Oil

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

RECEIVED

JUL 14 1992

GETTLER-RYAN, INC.
GENERAL CONTRACTOR



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: Robert Lauritzen

Client Project ID: 7610.05, Shell, Oakland
Sample Descript: Soil, SOW-1X
Analysis Method: EPA 8240
Lab Number: 207-1378

Sampled: Jul 9, 1992
Received: Jul 9, 1992
Analyzed: Jul 16, 1992
Reported: Jul 22, 1992

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone.....	500	N.D.
Benzene.....	100	N.D.
Bromodichloromethane.....	100	N.D.
Bromoform.....	100	N.D.
Bromomethane.....	100	N.D.
2-Butanone.....	500	N.D.
Carbon disulfide.....	100	N.D.
Carbon tetrachloride.....	100	N.D.
Chlorobenzene.....	100	N.D.
Chloroethane.....	100	N.D.
2-Chloroethyl vinyl ether.....	500	N.D.
Chloroform.....	100	N.D.
Chloromethane.....	100	N.D.
Dibromochloromethane.....	100	N.D.
1,1-Dichloroethane.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.
1,1-Dichloroethene.....	100	N.D.
cis-1,2-Dichloroethene.....	100	N.D.
trans-1,2-Dichloroethene.....	100	N.D.
1,2-Dichloropropane.....	100	N.D.
cis-1,3-Dichloropropene.....	100	N.D.
trans-1,3-Dichloropropene.....	100	N.D.
Ethylbenzene.....	100	N.D.
2-Hexanone.....	500	N.D.
Methylene chloride.....	250	N.D.
4-Methyl-2-pentanone.....	500	N.D.
Styrene.....	100	N.D.
1,1,2,2-Tetrachloroethane.....	100	N.D.
Tetrachloroethene.....	100	N.D.
Toluene.....	100	N.D.
1,1,1-Trichloroethane.....	100	N.D.
1,1,2-Trichloroethane.....	100	N.D.
Trichloroethene.....	100	N.D.
Trichlorofluoromethane.....	100	N.D.
Vinyl acetate.....	100	N.D.
Vinyl chloride.....	100	N.D.
Total Xylenes.....	100	N.D.

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

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: Robert Lauritzen

Client Project ID: 7610.05, Shell, Oakland
Sample Matrix: Soil
Analysis Method: EPA 5030/8015/8020
First Sample #: 207-1378

Sampled: Jul 9, 1992
Received: Jul 9, 1992
Reported: Jul 22, 1992

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 207-1378 SOW-1X	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Purgeable Hydrocarbons	1.0	6.4					
Benzene	0.0050	N.D.					
Toluene	0.0050	N.D.					
Ethyl Benzene	0.0050	N.D.					
Total Xylenes	0.0050	N.D.					

Chromatogram Pattern: Non Gas
Mix > C8

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	7/13/92
Instrument Identification:	GCHP-7
Surrogate Recovery, %: (QC Limits = 70-130%)	87

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

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

Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jul 9, 1992
2150 W. Winton Avenue	Sample Matrix: Soil	Received: Jul 9, 1992
Hayward, CA 94545	Analysis Method: EPA 3550/8015	Reported: Jul 22, 1992
Attention: Robert Lauritzen	First Sample #: 207-1377	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 207-1377 SL-1X	Sample I.D. 207-1378 SOW1-X	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Extractable Hydrocarbons	1.0	27	1.2				
Chromatogram Pattern:		Non Diesel C9-C13 & > C17	Discrete Peaks				

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	7/13/92	7/13/92
Date Analyzed:	7/14/92	7/14/92
Instrument Identification:	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

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: Robert Lauritzen

Client Project ID: 7610.05, Shell, Oakland
Sample Matrix: Soil
Analysis Method: EPA 3550/8015
First Sample #: 207-1377

Sampled: Jul 9, 1992
Received: Jul 9, 1992
Reported: Jul 22, 1992

FUEL FINGERPRINT AS MOTOR OIL

Analyte	Reporting Limit mg/kg	Sample I.D. 207-1377 SL-1X	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Extractable Hydrocarbons	1.0	340					
Chromatogram Pattern:		Motor Oil C9-C13					

Quality Control Data

Report Limit Multiplication Factor:	4.0
Date Extracted:	7/13/92
Date Analyzed:	7/14/92
Instrument Identification:	GCHP-4

Extractable Hydrocarbons are quantitated against a fresh diesel 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: Robert Lauritzen

Client Project ID: 7610.05, Shell, Oakland
Matrix Descript: Soil
Analysis Method: SM 5520 E&F (Gravimetric)
First Sample #: 207-1378

Sampled: Jul 9, 1992
Received: Jul 9, 1992
Extracted: Jul 13, 1992
Analyzed: Jul 13, 1992
Reported: Jul 22, 1992

TOTAL RECOVERABLE PETROLEUM OIL

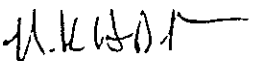
Sample Number	Sample Description	Oil & Grease mg/kg
207-1378	SOW-1X	59

Detection Limits:

50

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

SEQUOIA ANALYTICAL


Nokowhat D. Herrera
Project Manager

2071378.GET <5>



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: Robert Lauritzen

Client Project ID: 7610.05, Shell, Oakland
Sample Descript: Soil, SOW-1X
Lab Number: 207-1378

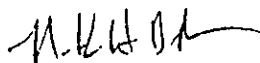
Sampled: Jul 9, 1992
Received: Jul 9, 1992
Extracted: Jul 13, 1992
Analyzed: Jul 16, 1992
Reported: Jul 22, 1992

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium.....	0.50	N.D.
Chromium.....	0.50	60
Lead.....	5.0	N.D.
Nickel.....	2.5	66
Zinc.....	0.50	34

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

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: Robert Lauritzen

Client Project ID: 7610.05, Shell, Oakland
Method (units): EPA 8240 (µg/L purged)
Analyst(s): G.Meyer
QC Sample #: BLK071492A


Q.C. Sample Dates

Analyzed: Jul 14, 1992
Reported: Jul 22, 1992

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike % Recovery	Relative % Difference
1,1-Dichloroethene	N.D.	50	55	110	56	112	1.8
Trichloroethene	N.D.	50	44	88	43	86	2.3
Benzene	N.D.	50	49	98	48	96	2.1
Toluene	N.D.	50	50	100	50	100	0.0
Chlorobenzene	N.D.	50	51	102	50	100	2.0

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



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: Robert Lauritzen

Client Project ID: 7610.05, Shell, Oakland

QC Sample Group: 2071377- 78

Reported: Jul 22, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	E.Cunanan	E.Cunanan	E.Cunanan	E.Cunanan	R.Lee
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Jul 13, 1992	Jul 13, 1992	Jul 13, 1992	Jul 13, 1992	Jul 14, 1992
QC Sample #:	GBLK071392	GBLK071392	GBLK071392	GBLK071392	DBLK071392
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60	15
Conc. Matrix Spike:	0.20	0.19	0.19	0.59	14
Matrix Spike % Recovery:	100	95	95	98	93
Conc. Matrix Spike Dup.:	0.19	0.19	0.19	0.57	16
Matrix Spike Duplicate % Recovery:	95	95	95	95	107
Relative % Difference:	5.1	0.0	0.0	3.4	13

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



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: Robert Lauritzen

Client Project ID: 7610.05, Shell, Oakland

QC Sample Group: 207-1378

Reported: Jul 22, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Oil & Grease	Cadmium	Chromium	Lead	Nickel	Zinc
Method:	SM5520E&F	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Analyst:	M.Shidt	C.Medefesser	C.Medefesser	C.Medefesser	C.Medefesser	C.Medefesser
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Jul 13, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992
QC Sample #:	BLK071392	207-1150	207-1150	207-1150	207-1150	207-1150
Sample Conc.:	N.D.	N.D.	30	22	34	53
Spike Conc. Added:	1,000	100	100	100	100	100
Conc. Matrix Spike:	880	78	110	110	110	130
Matrix Spike % Recovery:	88	78	80	88	76	77
Conc. Matrix Spike Dup.:	850	84	120	110	120	140
Matrix Spike Duplicate % Recovery:	85	84	90	88	86	87
Relative % Difference:	3.5	7.4	8.7	0.0	8.7	7.4

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



Site Address: 2800 Telegraph Ave Oakland

WIC#: 204-5508-2303

Shell Engineers: Stan Roller Phone No. 685-3850
Fax # (510) 685-3943

Consultant Name & Address: Gettler-Ryan / GeoStrategies
7610.05 2150 W. Winton Ave.
Hayward, California 94545

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

Comments:

Sampled By: Clyde Galantine

Printed Name: Clyde Galantine

Sample ID	Date	Soil	Water	Air	No. of conts.
SL-1X	7-9-92	X			1
SOW-1X	7-9-92	X			1

Analysis Required

COPY

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	TPH-O	ICAPS metal
	X					X	
X	X	X	X		X		X

LAB: Sequoia

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/ COMMENT'S
2x4		N	2071377	
2x4		N	2071378	

Relinquished By (signature): Clyde Galantine

Printed name: Clyde Galantine

Date: 7/9/92
Time: 2:00

Received (signature): Rebekah Harper

Printed name: Rebekah Harper

Date: 7/9/92
Time: 2:00

Relinquished By (signature): Rebekah Harper

Printed name: Rebekah Harper

Date: 7/9/92
Time: 2:35

Received (signature): Mike

Printed name: Mike

Date: 7/9/92
Time: 2:35

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



SEQUOIA ANALYTICAL

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

RECEIVED

JUL - 7 1992

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

GETTLER-RYAN INC.
GENERAL CONTRACTORS

Project: 7610.05, Shell, Oakland

Enclosed are the results from 2 soil samples received at Sequoia Analytical on June 18, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2063576	Soil, Comp., SS-1,A-B	6/18/92	California LUFT Manual, 12/87 EPA 5030/8015/8020
2063577	Soil, SWS-1A,B,C,D	6/18/92	EPA 8240 SM 5520 E&F (Gravimetric) 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

Nokowhat D. Herrera
Project Manager



SEQUOIA ANALYTICAL

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

Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jun 18, 1992
2150 W. Winton Avenue	Sample Matrix: Soil	Received: Jun 18, 1992
Hayward, CA 94545	Analysis Method: EPA 5030/8015/8020	Reported: Jul 6, 1992
Attention: Robert Lauritzen	First Sample #: 206-3576	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 206-3576 Comp.SS-1, A-B	Sample I.D. 206-3577 SWS-1,A,B,C,D	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Purgeable Hydrocarbons	1.0	N.D.	N.D.				
Benzene	0.005	N.D.	N.D.				
Toluene	0.005	N.D.	N.D.				
Ethyl Benzene	0.005	N.D.	N.D.				
Total Xylenes	0.005	N.D.	0.006				
Chromatogram Pattern:		--	--				

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	6/26/92	6/22/92
Instrument Identification:	GCHP-7	GCHP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	99	N.D.

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jun 18, 1992
2150 W. Winton Avenue	Sample Matrix: Soil	Received: Jun 18, 1992
Hayward, CA 94545	Analysis Method: EPA 3550/8015	Reported: Jul 6, 1992
Attention: Robert Lauritzen	First Sample #: 206-3577	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 206-3577 SWS-1,A,B,C,D	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
---------	--------------------------	--	-------------	-------------	-------------	-------------	-------------

Extractable Hydrocarbons	1.0	11					
--------------------------	-----	----	--	--	--	--	--

Chromatogram Pattern: --

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	6/23/92
Date Analyzed:	6/24/92
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

Nokowhat D. Herrera
Project Manager



SEQUOIA ANALYTICAL

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

Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jun 18, 1992
2150 W. Winton Avenue	Sample Descript: Soil, SWS-1A,B,C,D	Received: Jun 18, 1992
Hayward, CA 94545	Analysis Method: EPA 8240	Analyzed: Jun 23, 1992
Attention: Robert Lauritzen	Lab Number: 206-3577	Reported: Jul 6, 1992

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone.....	500	N.D.
Benzene.....	100	N.D.
Bromodichloromethane.....	100	N.D.
Bromoform.....	100	N.D.
Bromomethane.....	100	N.D.
2-Butanone.....	500	N.D.
Carbon disulfide.....	100	N.D.
Carbon tetrachloride.....	100	N.D.
Chlorobenzene.....	100	N.D.
Chloroethane.....	100	N.D.
2-Chloroethyl vinyl ether.....	500	N.D.
Chloroform.....	100	N.D.
Chloromethane.....	100	N.D.
Dibromochloromethane.....	100	N.D.
1,1-Dichloroethane.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.
1,1-Dichloroethene.....	100	N.D.
cis-1,2-Dichloroethene.....	100	N.D.
trans-1,2-Dichloroethene.....	100	N.D.
1,2-Dichloropropane.....	100	N.D.
cis-1,3-Dichloropropene.....	100	N.D.
trans-1,3-Dichloropropene.....	100	N.D.
Ethylbenzene.....	100	N.D.
2-Hexanone.....	500	N.D.
Methylene chloride.....	250	N.D.
4-Methyl-2-pentanone.....	500	N.D.
Styrene.....	100	N.D.
1,1,2,2-Tetrachloroethane.....	100	N.D.
Tetrachloroethene.....	100	N.D.
Toluene.....	100	N.D.
1,1,1-Trichloroethane.....	100	N.D.
1,1,2-Trichloroethane.....	100	N.D.
Trichloroethene.....	100	N.D.
Trichlorofluoromethane.....	100	N.D.
Vinyl acetate.....	100	N.D.
Vinyl chloride.....	100	N.D.
Total Xylenes	100	390

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

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jun 18, 1992
2150 W. Winton Avenue	Sample Descript: Soil	Received: Jun 18, 1992
Hayward, CA 94545	Analysis Method: California LUFT Manual, 12/87	Analyzed: Jun 24, 1992
Attention: Robert Lauritzen	First Sample #: 206-3576	Reported: Jul 6, 1992

ORGANIC LEAD

Sample Number	Sample Description	Sample Results mg/kg (ppm)
206-3576	Comp., SS-1,A-B	N.D.

Detection Limits:	0.050
-------------------	-------

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

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jun 18, 1992
2150 W. Winton Avenue	Matrix Descript: Soil	Received: Jun 18, 1992
Hayward, CA 94545	Analysis Method: SM 5520 E&F (Gravimetric)	Extracted: Jun 22, 1992
Attention: Robert Lauritzen	First Sample #: 206-3577	Analyzed: Jun 22, 1992
		Reported: Jul 6, 1992

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg
206-3577	SWS-1A,B,C,D	260

Detection Limits: 50

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

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

Client Project ID: 7610.05, Shell, Oakland

Attention: Robert Lauritzen

QC Sample Group: 206-3576

Reported: Jul 6, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Organic Lead
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	LUFT
Analyst:	A.Maralit	A.Maralit	A.Maralit	A.Maralit	S.Chin
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Jun 26, 1992	Jun 26, 1992	Jun 26, 1992	Jun 26, 1992	Jun 24, 1992
QC Sample #:	GBLK062692	GBLK062692	GBLK062692	GBLK062692	206-4169
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60	0.30
Conc. Matrix Spike:	0.23	0.22	0.22	0.65	0.24
Matrix Spike % Recovery:	115	110	110	108	80
Conc. Matrix Spike Dup.:	0.23	0.23	0.23	0.69	0.23
Matrix Spike Duplicate % Recovery:	115	115	115	115	77
Relative % Difference:	0.0	4.4	4.4	6.0	4.3

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



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

Client Project ID: 7610.05, Shell, Oakland

Attention: Robert Lauritzen

QC Sample Group: 206-3577

Reported: Jul 6, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Diesel	Oil & Grease
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015	SM5520E&F
Analyst:	C.Donohue	C.Donohue	C.Donohue	C.Donohue	M.Tran	M.Shkidt
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Jun 22, 1992	Jun 22, 1992	Jun 22, 1992	Jun 22, 1992	Jun 24, 1992	Jun 22, 1992
QC Sample #:	GBLK062292	GBLK062292	GBLK062292	GBLK062292	DBLK062392	BLK062292
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	1000
Conc. Matrix Spike:	0.19	0.19	0.19	0.56	10	710
Matrix Spike % Recovery:	95	95	95	93	67	71
Conc. Matrix Spike Dup.:	0.20	0.20	0.19	0.58	12	680
Matrix Spike Duplicate % Recovery:	100	100	95	97	80	68
Relative % Difference:	5.1	5.1	0.0	3.5	18	4.3

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



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: Robert Lauritzen

Client Project ID: 7610.05, Shell, Oakland
Method (units): EPA 8240 (µg/L purged)
Analyst(s): S.Scott
QC Sample #: BLK062292

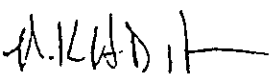
Q.C. Sample Dates

Analyzed: Jun 22, 1992
Reported: Jul 6, 1992

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike % Recovery	Relative % Difference
1,1-Dichloroethene	N.D.	50	48	96	48	96	0.0
Trichloroethene	N.D.	50	51	102	51	102	0.0
Benzene	N.D.	50	55	110	54	108	1.8
Toluene	N.D.	50	54	108	54	108	0.0
Chlorobenzene	N.D.	50	54	108	54	108	0.0

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 1 of 1

Site Address: 2800 Telegraph Ave Oakland

WIC#: 204-5508-2303

Shell Engineer: Stan Roller Phone No. 685-3850
(510) Fax #: 685-3943

Consultant Name & Address: Gettler-Ryan / GeoStrategies
7610 OS 2150 W. Winton Ave.
Hayward, California 94545

Consultant Contact: Clyde Galantine Phone No. 783-7500
~~John Werfal~~ / John Werfal Fax #: 783-1089

Comments: _____

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 Org Pb	Oil & Grease - 5520 E&F						
X	X	X	X	X	X						

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input 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.

Sample ID	Date	Soil	Water	Air	No. of conds.
SS-1A-B	6-18-92	X			2
SWS-1A-1D	↓	X			4
SWS-1	↓	X			1

Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
27L		Y	2063576	A/B
27L		Y	2063577	A-D
1/2 gallon		N	HOLD	

Relinquished By (signature): Clyde Galantine Printed name: Clyde Galantine
Relinquished By (signature): Refrigerator 2 Printed name: _____
Relinquished By (signature): T. Olive Printed name: T. OLIVE

Date: 6-18-92 Time: 3:20 Received (signature): Refrigerator 2 Printed name: _____ Date: 6-18-92 Time: 3:20
Date: 6-18-92 Time: 3:50 Received (signature): T. Olive Printed name: OLIVE Date: 6/18 Time: 3:55
Date: 6/18/92 Time: 4:30 Received (signature): Min Printed name: NGUYEN Date: 6/18 Time: 4:30

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

COPY



SEQUOIA ANALYTICAL

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

RECEIVED

JUL 20 1992

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

GETTLER-RYAN INC.
GENERAL CONTRACTORS

Project: 7610.05, Shell, Oakland

Enclosed are the results from 1 soil sample and 1 other sample received at Sequoia Analytical on July 9, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2071205	Soil, SWS-2A-D	7/9/92	Corrosivity, Iginitability, and Reactivity EPA 8270 Fuel Fingerprint as Motor Oil STLC Title 22 Metals
2071205	TCLP Extract of Soil Sample, SWS-2A-D	7/9/92	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

Nokowhat D. Herrera
Project Manager



SEQUOIA ANALYTICAL

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

Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jul 9, 1992
2150 W. Winton Avenue	Sample Descript: Soil, SES-2A-D	Received: Jul 9, 1992
Hayward, CA 94545	Analysis Method: EPA 8270	Extracted: Jul 13, 1992
Attention: Gettler Lauritzen	Lab Number: 207-1205	Analyzed: Jul 16, 1992
		Reported: Jul 20, 1992

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene.....	100	N.D.
Acenaphthylene.....	100	N.D.
Aniline.....	100	N.D.
Anthracene.....	100	N.D.
Benzidine.....	2,500	N.D.
Benzoic Acid.....	500	N.D.
Benzo(a)anthracene.....	100	N.D.
Benzo(b)fluoranthene.....	100	N.D.
Benzo(k)fluoranthene.....	100	N.D.
Benzo(g,h,i)perylene.....	100	N.D.
Benzo(a)pyrene.....	100	N.D.
Benzyl alcohol.....	100	N.D.
Bis(2-chloroethoxy)methane.....	100	N.D.
Bis(2-chloroethyl)ether.....	100	N.D.
Bis(2-chloroisopropyl)ether.....	100	N.D.
Bis(2-ethylhexyl)phthalate.....	500	N.D.
4-Bromophenyl phenyl ether.....	100	N.D.
Butyl benzyl phthalate.....	100	N.D.
4-Chloroaniline.....	100	N.D.
2-Chloronaphthalene.....	100	N.D.
4-Chloro-3-methylphenol.....	100	N.D.
2-Chlorophenol.....	100	N.D.
4-Chlorophenyl phenyl ether.....	100	N.D.
Chrysene.....	100	N.D.
Dibenz(a,h)anthracene.....	100	N.D.
Dibenzofuran.....	100	N.D.
Di-N-butyl phthalate.....	500	N.D.
1,3-Dichlorobenzene.....	100	N.D.
1,4-Dichlorobenzene.....	100	N.D.
1,2-Dichlorobenzene.....	100	N.D.
3,3-Dichlorobenzidine.....	500	N.D.
2,4-Dichlorophenol.....	100	N.D.
Diethyl phthalate.....	100	N.D.
2,4-Dimethylphenol.....	100	N.D.
Dimethyl phthalate.....	100	N.D.
4,6-Dinitro-2-methylphenol.....	500	N.D.
2,4-Dinitrophenol.....	500	N.D.



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: Gettler Lauritzen

Client Project ID: 7610.05, Shell, Oakland
Sample Descript: Soil, SES-2A-D
Analysis Method: EPA 8270
Lab Number: 207-1205

Sampled: Jul 9, 1992
Received: Jul 9, 1992
Extracted: Jul 13, 1992
Analyzed: Jul 16, 1992
Reported: Jul 20, 1992

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene.....	100	N.D.
2,6-Dinitrotoluene.....	100	N.D.
DI-N-octyl phthalate.....	100	N.D.
Fluoranthene.....	100	N.D.
Fluorene.....	100	N.D.
Hexachlorobenzene.....	100	N.D.
Hexachlorobutadiene.....	100	N.D.
Hexachlorocyclopentadiene.....	100	N.D.
Hexachloroethane.....	100	N.D.
Indeno(1,2,3-cd)pyrene.....	100	N.D.
Isophorone.....	100	N.D.
2-Methylnaphthalene.....	100	N.D.
2-Methylphenol.....	100	N.D.
4-Methylphenol.....	100	N.D.
Naphthalene.....	100	N.D.
2-Nitroaniline.....	500	N.D.
3-Nitroaniline.....	500	N.D.
4-Nitroaniline.....	500	N.D.
Nitrobenzene.....	100	N.D.
2-Nitrophenol.....	100	N.D.
4-Nitrophenol.....	500	N.D.
N-Nitrosodiphenylamine.....	100	N.D.
N-Nitroso-di-N-propylamine.....	100	N.D.
Pentachlorophenol.....	500	N.D.
Phenanthrene.....	100	N.D.
Phenol.....	100	N.D.
Pyrene.....	100	N.D.
1,2,4-Trichlorobenzene.....	100	N.D.
2,4,5-Trichlorophenol.....	500	N.D.
2,4,6-Trichlorophenol.....	100	N.D.

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

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jul 9, 1992
2150 W. Winton Avenue	Sample Matrix: TCLP Extract of Soil Sample	Received: Jul 9, 1992
Hayward, CA 94545	Analysis Method: EPA 5030/8015/8020	Reported: Jul 20, 1992
Attention: Gettler Lauritzen	First Sample #: 207-1205	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 207-1205 SWS-2A-D
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:	20
Date Analyzed:	7/14/92
Instrument Identification:	GCHP-3
Surrogate Recovery, %: (QC Limits = 70-130%)	106

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jul 9, 1992
2150 W. Winton Avenue	Sample Matrix: Soil	Received: Jul 9, 1992
Hayward, CA 94545	Analysis Method: EPA 3550/8015	Reported: Jul 20, 1992
Attention: Gettler Lauritzen	First Sample #: 207-1205	

FUEL FINGERPRINT AS MOTOR OIL

Analyte	Reporting Limit mg/kg	Sample I.D. 207-1205 SWS-2A-D
Extractable Hydrocarbons	1.0	520
Chromatogram Pattern:		Motor Oil

Quality Control Data

Report Limit Multiplication Factor:	10
Date Extracted:	7/13/92
Date Analyzed:	7/14/92
Instrument Identification:	GCHP-4 INJ-A

Extractable Hydrocarbons are quantitated against a fresh motor oil 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

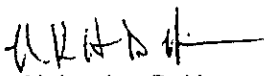
Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jul 9, 1992
2150 W. Winton Avenue	Sample Descript: Soil, SWS-2A-D	Received: Jul 9, 1992
Hayward, CA 94545		Analyzed: Jul 10-14, 1992
Attention: Gettler Lauritzen	Lab Number: 207-1205	Reported: Jul 20, 1992

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH.....	N.A.	7.9
Ignitability:		
Flashpoint (Pensky-Martens), °C.....	N.A.	> 100 °C
Reactivity:		
Sulfide, mg/kg.....	10	N.D.
Cyanide, mg/kg.....	0.50	N.D.
Reaction with water.....	N.A.	Negative

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

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Jul 9, 1992
2150 W. Winton Avenue	Sample Descript: Soil, SWS-2A-D	Received: Jul 9, 1992
Hayward, CA 94545		Extracted: Jul 13, 1992
Attention: Gettler Lauritzen	Lab Number: 207-1205	Reported: Jul 20, 1992

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration

Waste Extraction Test

Total Threshold Limit Concentration

Analyte	STLC	Detection	Analysis	TTL	Detection	Analysis
	Max. Limit (mg/L)	Limit (mg/L)	Result (mg/L)	Max. Limit (mg/kg)	Limit (mg/kg)	Result (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	0.73	500	5.0	-
Barium	100	0.10	10	10,000	5.0	-
Beryllium	0.75	0.010	0.010	75	0.50	-
Cadmium	1.0	0.010	0.018	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium (III)	560	0.010	0.20	2,500	0.50	-
Cobalt	80	0.050	0.58	8,000	2.5	-
Copper	25	0.010	0.51	2,500	0.50	-
Lead	5.0	0.10	5.6	1,000	5.0	-
Mercury	0.20	0.00020	N.D.	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	1.3	2,000	2.5	-
Selenium	1.0	0.10	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.83	2,400	2.5	-
Zinc	250	0.010	2.8	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTL results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

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: Gettler Lauritzen

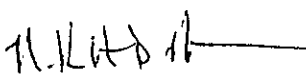
Client Project ID: 7610.05, Shell, Oakland
Method: EPA 8270
Analyst(s): N. Injejkian
QC Sample #: SBLK071092

Q.C. Sample Dates
Extracted: Jul 10, 1992
Analyzed: Jul 13, 1992
Reported: Jul 20, 1992

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike % Recovery	Relative % Difference
Phenol	N.D.	100	80	80	83	83	3.7
2-Chlorophenol	N.D.	100	81	81	81	81	0.0
1,4-Dichloro-benzene	N.D.	50	41	82	40	80	2.5
N-Nitroso-Di-N-propylamine	N.D.	50	41	82	40	80	2.5
1,2,4-Trichloro-benzene	N.D.	50	44	88	42	84	4.7
4-Chloro-3-Methylphenol	N.D.	100	79	79	81	81	2.5
Acenaphthene	N.D.	50	42	84	41	82	2.4
4-Nitrophenol	N.D.	100	74	74	65	65	13
2,4-Dinitro-toluene	N.D.	50	36	72	34	68	5.7
Pentachloro-phenol	N.D.	100	91	91	82	82	10
Pyrene	N.D.	50	36	72	38	76	5.4

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



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: Gettler Lauritzen

Client Project ID: 7610.05, Shell, Oakland

QC Sample Group: 207-1205

Reported: Jul 20, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	M. Nipp	M. Nipp	M. Nipp	M. Nipp	R. Lee
Reporting Units:	µg/L	µg/L	µg/L	µg/L	mg/kg
Date Analyzed:	Jul 14, 1992	Jul 14, 1992	Jul 14, 1992	Jul 14, 1992	Jul 14, 1992
QC Sample #:	GBLK071492	GBLK071492	GBLK071492	GBLK071492	DBLK071392
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	10	10	10	30	15
Conc. Matrix Spike:	10	11	11	32	14
Matrix Spike % Recovery:	100	110	110	107	93
Conc. Matrix Spike Dup.:	11	11	11	33	16
Matrix Spike Duplicate % Recovery:	110	110	110	110	107
Relative % Difference:	9.5	0.0	0.0	3.1	13

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



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: Gettler Lauritzen

Client Project ID: 7610.05, Shell, Oakland

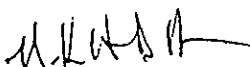
QC Sample Group: 207-1205

Reported: Jul 20, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	pH	Flashpoint	Reactive Sulfide	Cyanide
Method:	EPA 9045	EPA 1010	EPA 9030	EPA 9010
Analyst:	Y. Arteaga	K. Follett	K. Follett	A. Savva
Reporting Units:	N.A.	N.A.	mg/kg	mg/kg
Date Analyzed:	Jul 10, 1992	Jul 14, 1992	Jul 14, 1992	Jul 15, 1992
QC Sample #:	207-1205	207-1205	207-1375	207-1276
Sample Conc.:	7.9	> 100°C	N.D.	N.D.
Spike Conc. Added:	N.A.	N.A.	1,300	8.0
Conc. Matrix Spike:	N.A.	N.A.	1,000	6.1
Matrix Spike % Recovery:	N.A.	N.A.	77	76
Conc. Matrix Spike Dup.:	7.8	> 100°C	1,000	6.6
Matrix Spike Duplicate % Recovery:	N.A.	N.A.	77	83
Relative % Difference:	1.3	0.0	0.0	7.9

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



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

Client Project ID: 7610.05, Shell, Oakland

Attention: Gettler Lauritzen

QC Sample Group: 207-1205

Reported: Jul 20, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	STLC- Barium	STLC- Beryllium	STLC- Cadmium	STLC- Chromium	STLC- Cobalt	STLC- Copper
---------	-----------------	--------------------	------------------	-------------------	-----------------	-----------------

Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
Reporting Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992
QC Sample #:	206-4295	206-4295	206-4295	206-4295	206-4295	206-4295

Sample Conc.:	N.D.	N.D.	0.024	N.D.	N.D.	N.D.
Spike Conc. Added:	5.0	5.0	5.0	5.0	5.0	5.0
Conc. Matrix Spike:	5.1	5.0	4.9	5.0	5.0	5.3
Matrix Spike % Recovery:	102	100	98	100	100	106
Conc. Matrix Spike Dup.:	5.1	5.0	4.9	5.0	5.0	5.3
Matrix Spike Duplicate % Recovery:	102	100	98	100	100	106
Relative % Difference:	0.0	0.0	0.0	0.0	0.0	0.0

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



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

Client Project ID: 7610.05, Shell, Oakland

Attention: Gettler Lauritzen

QC Sample Group: 207-1205

Reported: Jul 20, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	STLC- Molybdenum	STLC- Nickel	STLC- Silver	STLC- Vanadium	STLC- Zinc
---------	---------------------	-----------------	-----------------	-------------------	---------------

Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
Reporting Units:	mg/L	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992
QC Sample #:	206-4295	206-4295	206-4295	206-4295	206-4295

Sample Conc.:	N.D.	N.D.	N.D.	N.D.	2.7
Spike Conc. Added:	5.0	5.0	5.0	5.0	5.0
Conc. Matrix Spike:	5.2	4.9	4.8	5.1	7.7
Matrix Spike % Recovery:	104	98	96	102	100
Conc. Matrix Spike Dup.:	5.2	4.9	4.8	5.1	7.7
Matrix Spike Duplicate % Recovery:	104	98	96	102	100
Relative % Difference:	0.0	0.0	0.0	0.0	0.0

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



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: Gettler Lauritzen

Client Project ID: 7610.05, Shell, Oakland

QC Sample Group: 207-1205

Reported: Jul 20, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	STLC-Arsenic	STLC-Lead	STLC-Antimony	STLC-Selenium	STLC-Thallium	STLC-Mercury
---------	--------------	-----------	---------------	---------------	---------------	--------------

Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 245.1
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser	J. Martinez
Reporting Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 16, 1992	Jul 15, 1992
QC Sample #:	206-4295	206-4295	206-4295	206-4295	206-4295	207-1755

Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	5.0	5.0	5.0	5.0	5.0	0.0020
Conc. Matrix Spike:	5.4	5.0	5.1	5.6	5.0	0.0020
Matrix Spike % Recovery:	108	100	102	112	100	100
Conc. Matrix Spike Dup.:	5.4	5.0	5.0	5.0	4.9	0.0019
Matrix Spike Duplicate % Recovery:	108	100	100	100	98	95
Relative % Difference:	0.0	0.0	2.0	11	2.0	5.1

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



Site Address: 2800 Telegraph Ave Oakland

WIC#: 204-5508-2303

Shell Engineer: Stan Roller Phone No. 685-3850
Fax # (510) 685-3943

Consultant Name & Address: Gettler-Ryan / GeoStrategies
7610.05 2150 W. Winton Ave.
Hayward, California 94545

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

Comments: Disposal 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	<u>8270</u>
Test for Disposal	5500 Est TPH-01
<u>RCL</u>	
<u>TCLP BTEX</u>	
<u>STLC 17 Metal</u>	

LAB: Squoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input 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"/>	5413	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 conts.
<u>SWS-2A-D</u>	<u>7-9-92</u>	<u>X</u>			<u>4</u>

Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
<u>254</u>		<u>Y</u>		<u>1205</u> <u>2074b</u>

COPY

Relinquished By (signature): Clyde Galantine
Relinquished By (signature): Rebekah Harper
Relinquished By (signature): _____

Printed name: Clyde Galantine
Printed name: Rebekah Harper
Printed name: _____

Date: 7-9-92
Time: 2:00
Date: 7/9/92
Time: 2:35
Date: _____
Time: _____

Received (signature): Rebekah Harper
Received (signature): _____
Received (signature): M

Printed name: Rebekah Harper
Printed name: _____
Printed name: NGUYEN

Date: 7/9/92
Time: 2:00
Date: _____
Time: _____
Date: 7/9
Time: 2:35

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



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: Clyde Galantine

Project: 7610.05, Shell, Oakland

Enclosed are the results from 2 soil samples, 1 water sample, received at Sequoia Analytical on August 18, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2083029	Water, SH-1	8/18/92	EPA 3510/3520/8015 EPA 5030/8015/8020 SM 5520 B&F (Gravimetric)
2083030	Soil, SOW-1Y	8/18/92	Cd, Cr, Pb, Ni, Zn EPA 3550/8015 EPA 5030/8015/8020 EPA 8240 SM 5520 E&F (Gravimetric)
2083031	Soil, SL-1Y	8/18/92	EPA 3550/8015 EPA 3550/8015 as Motor Oil

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



SEQUOIA ANALYTICAL

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

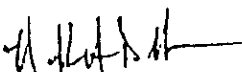
Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Aug 18, 1992
2150 W. Winton Avenue	Sample Descript: Soil, SOW-1Y	Received: Aug 18, 1992
Hayward, CA 94545	Analysis Method: EPA 8240	Analyzed: Aug 24, 1992
Attention: Clyde Galantine	Lab Number: 208-3030	Reported: Aug 31, 1992

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone.....	500	N.D.
Benzene.....	100	N.D.
Bromodichloromethane.....	100	N.D.
Bromoform.....	100	N.D.
Bromomethane.....	100	N.D.
2-Butanone.....	500	N.D.
Carbon disulfide.....	100	N.D.
Carbon tetrachloride.....	100	N.D.
Chlorobenzene.....	100	N.D.
Chloroethane.....	100	N.D.
2-Chloroethyl vinyl ether.....	500	N.D.
Chloroform.....	100	N.D.
Chloromethane.....	100	N.D.
Dibromochloromethane.....	100	N.D.
1,1-Dichloroethane.....	100	N.D.
1,2-Dichloroethane.....	100	N.D.
1,1-Dichloroethene.....	100	N.D.
cis-1,2-Dichloroethene.....	100	N.D.
trans-1,2-Dichloroethene.....	100	N.D.
1,2-Dichloropropane.....	100	N.D.
cis-1,3-Dichloropropene.....	100	N.D.
trans-1,3-Dichloropropene.....	100	N.D.
Ethylbenzene.....	100	N.D.
2-Hexanone.....	500	N.D.
Methylene chloride.....	250	N.D.
4-Methyl-2-pentanone.....	500	N.D.
Styrene.....	100	N.D.
1,1,2,2-Tetrachloroethane.....	100	N.D.
Tetrachloroethene.....	100	N.D.
Toluene.....	100	N.D.
1,1,1-Trichloroethane.....	100	N.D.
1,1,2-Trichloroethane.....	100	N.D.
Trichloroethene.....	100	N.D.
Trichlorofluoromethane.....	100	N.D.
Vinyl acetate.....	100	N.D.
Vinyl chloride.....	100	N.D.
Total Xylenes.....	100	N.D.

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

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Aug 18, 1992
2150 W. Winton Avenue	Sample Matrix: Water	Received: Aug 18, 1992
Hayward, CA 94545	Analysis Method: EPA 5030/8015/8020	Reported: Aug 31, 1992
Attention: Clyde Galantine	First Sample #: 208-3029	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/L	Sample I.D. 208-3029 SH-1	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Purgeable Hydrocarbons	0.050	0.11					
Benzene	0.00050	N.D.					
Toluene	0.00050	N.D.					
Ethyl Benzene	0.00050	N.D.					
Total Xylenes	0.00050	N.D.					

Chromatogram Pattern: Gas

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	8/20/92
Instrument Identification:	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	108

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Aug 18, 1992
2150 W. Winton Avenue	Sample Matrix: Soil	Received: Aug 18, 1992
Hayward, CA 94545	Analysis Method: EPA 5030/8015/8020	Reported: Aug 31, 1992
Attention: Clyde Galantine	First Sample #: 208-3030	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 208-3030 SOW-1Y	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
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:	8/20/92
Instrument Identification:	GCHP-6
Surrogate Recovery, %: (QC Limits = 70-130%)	84

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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Aug 18, 1992
2150 W. Winton Avenue	Sample Matrix: Water	Received: Aug 18, 1992
Hayward, CA 94545	Analysis Method: EPA 3510/3520/8015	Reported: Aug 31, 1992
Attention: Clyde Galantne	First Sample #: 208-3029	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/L	Sample I.D. 208-3029 SH-1	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
Extractable Hydrocarbons	0.050	N.D.					

Chromatogram Pattern: --

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	8/20/92
Date Analyzed:	8/21/92
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

Nokowhat D. Herrera
Project Manager



SEQUOIA ANALYTICAL

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

Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Aug 18, 1992
2150 W. Winton Avenue	Sample Matrix: Soil	Received: Aug 18, 1992
Hayward, CA 94545	Analysis Method: EPA 3550/8015	Reported: Aug 31, 1992
Attention: Clyde Galantine	First Sample #: 208-3031	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS AS MOTOR OIL

Analyte	Reporting Limit mg/kg	Sample I.D. 208-3031 SL-1Y	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
---------	--------------------------	----------------------------------	-------------	-------------	-------------	-------------	-------------

Extractable Hydrocarbons	1.0	N.D.
--------------------------	-----	------

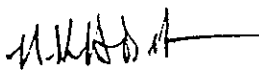
Chromatogram Pattern: --

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	8/20/92
Date Analyzed:	8/20/92
Instrument Identification:	GCHP-4

Extractable Hydrocarbons are quantitated against a fresh motor oil 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	Client Project ID: 7610.05, Shell, Oakland	Sampled: Aug 18, 1992
2150 W. Winton Avenue	Matrix Descript: Water	Received: Aug 18, 1992
Hayward, CA 94545	Analysis Method: SM 5520 B&F (Gravimetric)	Extracted: Aug 21, 1992
Attention: Clyde Galantine	First Sample #: 208-3029	Analyzed: Aug 21, 1992
		Reported: Aug 31, 1992

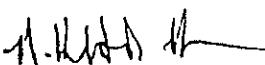
TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/L
208-3029	SH-1	N.D.

Detection Limits: 5.0

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

SEQUOIA ANALYTICAL


Nokowhat D. Herrera
Project Manager

2083030.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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Matrix Descript: Soil
Analysis Method: SM 5520 E&F (Gravimetric)
First Sample #: 208-3030

Sampled: Aug 18, 1992
Received: Aug 18, 1992
Extracted: Aug 20, 1992
Analyzed: Aug 20, 1992
Reported: Aug 31, 1992

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg
208-3030	SOW-1Y	N.D.

Detection Limits:

50

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

SEQUOIA ANALYTICAL

Nokowhat D. Herrera
Project Manager

2083030.GET <8>



SEQUOIA ANALYTICAL

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

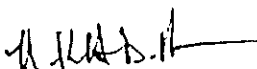
Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	Sampled: Aug 18, 1992
2150 W. Winton Avenue	Sample Descript: Soil, SOW-1Y	Received: Aug 18, 1992
Hayward, CA 94545		Extracted: Aug 26, 1992
Attention: Clyde Galantine	Lab Number: 208-3030	Analyzed: Aug 27, 1992
		Reported: Aug 31, 1992

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/kg
Cadmium	0.50	0.64
Chromium	0.50	56
Lead	5.0	33
Nickel	2.5	83
Zinc	0.50	130

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

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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Method (units): EPA 8240 (µg/L purged)
Analyst(s): M. Williams
QC Sample #: BLK081792

Q.C. Sample Dates

Analyzed: Aug 17, 1992
Reported: Aug 31, 1992

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike % Recovery	Relative % Difference
1,1-Dichloroethene	N.D.	50	45	90	46	92	2.2
Trichloroethene	N.D.	50	40	80	39	78	2.5
Benzene	N.D.	50	45	90	44	88	2.2
Toluene	N.D.	50	44	88	43	86	2.9
Chlorobenzene	N.D.	50	44	88	44	88	0.0

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



SEQUOIA ANALYTICAL

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

Gettler Ryan Client Project ID: 7610.05, Shell, Oakland
2150 W. Winton Avenue
Hayward, CA 94545
Attention: Clyde Galantine QC Sample Group: 208-3029 Reported: Aug 31, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Diesel	Oil & Grease
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015	SM5520B&F
Analyst:	M.Nipp	M.Nipp	M.Nipp	M.Nipp	M.Tran	M.Shkidt
Reporting Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Date Analyzed:	Aug 19, 1992	Aug 19, 1992	Aug 19, 1992	Aug 19, 1992	Aug 19, 1992	Aug 21, 1992
QC Sample #:	GBLK081992	GBLK081992	GBLK081992	GBLK081992	DBLK081792	BLK082192
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.010	0.010	0.010	0.030	0.30	30
Conc. Matrix Spike:	0.010	0.010	0.010	0.030	0.19	25
Matrix Spike % Recovery:	100	100	100	100	63	83
Conc. Matrix Spike Dup.:	0.010	0.010	0.010	0.031	0.20	25
Matrix Spike Duplicate % Recovery:	100	100	100	103	67	83
Relative % Difference:	0.0	0.0	0.0	3.3	5.1	0.0

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



SEQUOIA ANALYTICAL

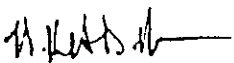
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan	Client Project ID: 7610.05, Shell, Oakland	
2150 W. Winton Avenue		
Hayward, CA 94545		
Attention: Clyde Galantine	QC Sample Group: 208-3030	Reported: Aug 31, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Oil & Grease
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	SM5520E&F
Analyst:	R.Geckler	R.Geckler	R.Geckler	R.Geckler	M.Shkidt
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Aug 20, 1992	Aug 20, 1992	Aug 20, 1992	Aug 20, 1992	Aug 20, 1992
QC Sample #:	GBLK082092	GBLK082092	GBLK082092	GBLK082092	BLK082092
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60	1000
Conc. Matrix Spike:	0.17	0.18	0.17	0.49	870
Matrix Spike % Recovery:	85	90	85	82	87
Conc. Matrix Spike Dup.:	0.18	0.18	0.17	0.50	880
Matrix Spike Duplicate % Recovery:	90	90	85	83	88
Relative % Difference:	5.7	0.0	0.0	2.0	1.1

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



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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland

QC Sample Group: 2083030 - 31

Reported: Aug 31, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel
----------------	--------

Method: EPA 8015
 Analyst: M. Tran
 Reporting Units: mg/kg
 Date Analyzed: Aug 20, 1992
 QC Sample #: DBLK082092

Sample Conc.: N.D.

Spike Conc.
Added: 15

Conc. Matrix
Spike: 13

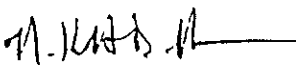
Matrix Spike
% Recovery: 87

Conc. Matrix
Spike Dup.: 12

Matrix Spike
Duplicate
% Recovery: 80

Relative
% Difference: 8.0

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



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

Client Project ID: 7610.05, Shell, Oakland

Attention: Clyde Galantine

QC Sample Group: 208-3030

Reported: Aug 31, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Cadmium	Chromium	Lead	Nickel	Zinc
---------	---------	----------	------	--------	------

Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Analyst:	C.Medefesser	C.Medefesser	C.Medefesser	C.Medefesser	C.Medefesser
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Aug 27, 1992	Aug 27, 1992	Aug 27, 1992	Aug 27, 1992	Aug 27, 1992
QC Sample #:	208-3030	208-3030	208-3030	208-3030	208-3030

Sample Conc.:	0.54	56	33	93	130
Spike Conc. Added:	100	100	100	250	250
Conc. Matrix Spike:	89	140	120	330	330
Matrix Spike % Recovery:	88	84	87	95	80
Conc. Matrix Spike Dup.:	91	160	110	330	330
Matrix Spike Duplicate % Recovery:	90	104	77	95	80
Relative % Difference:	2.2	13	8.7	0.0	0.0

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



Site Address: 2800 Telegraph Ave Oakland

WIC#: 204-5508-2303

Shell Engineer: Stan Roller
Phone No. 685-3850
Fax (510) 685-3943

Consultant Name & Address: Gettler-Ryan / GeoStrategies
7610.05 2150 W. Winton Ave.
Hayward, California 94545

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

Comments: All ambers are untreated.
All VOA's are treated

Sampled By: Clyde Galantine
Printed Name: Clyde Galantine

Analysis Required

COPY

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	ICAP Smetel	TPH-Oil
X	X	X	X	X	X	X	X

LAB: Sequoia

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 conts.
SH-1	8-18-92		X		7
SOW-1Y	8-18-92	X			1
SL-1Y	8-18-92	X			1

Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
		N		2083029
		N		30
		N		31

Relinquished By (signature): Clyde Galantine

Printed name: Clyde Galantine

Date: 8-18-92
Time: 16:00

Received (signature): Rebekah J. Harper

Printed name: Rebekah J. Harper

Date: 8/18/92
Time: 16:00

Relinquished By (signature): Rebekah J. Harper

Printed name: Rebekah J. Harper

Date: 8/18/92
Time: 16:30

Received (signature): Tim Castello

Printed name: Tim Castello

Date: 8-18-92
Time: 16:30

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



SEQUOIA ANALYTICAL

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

RECEIVED
AUG 18 1992

Gettler Ryan/Geostrategies
2150 W. Winton Avenue
Hayward, CA 94545
Attention: Cyde Galantine

GETTLER-RYAN INC.
GENERAL CONTRACTORS

Project: 7610.05, Shell, Oakland

Enclosed are the results from 1 soil composite sample received at Sequoia Analytical on August 18, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2082969	Soil Composite, SWS-3A-D	8/18/92	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

Nokowhat D. Herrera
Project Manager



SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063

(415) 364-9600 • FAX (415) 364-9233

Gettler Ryan/Geostrategies
.2150 W. Winton Avenue
Hayward, CA 94545
Attention: Cyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Sample Matrix: Soil Composite
Analysis Method: EPA 5030/8015/8020
First Sample #: 208-2969

Sampled: Aug 18, 1992
Received: Aug 18, 1992
Reported: Aug 25, 1992

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 208-2969 SWS-3A-D	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
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:	8/20/92
Instrument Identification:	GCHP-6
Surrogate Recovery, %: (QC Limits = 70-130%)	84

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

Gettier Ryan/Geostrategies	Client Project ID: 7610.05, Shell, Oakland	Sampled: Aug 18, 1992
2150 W. Winton Avenue	Sample Matrix: Soil Composite	Received: Aug 18, 1992
Hayward, CA 94545	Analysis Method: EPA 3550/8015	Reported: Aug 25, 1992
Attention: Cylda Galantine	First Sample #: 208-2969	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 208-2969 SWS-3A-D	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.	Sample I.D.
---------	--------------------------	-------------------------------------	-------------	-------------	-------------	-------------	-------------

Extractable Hydrocarbons	1.0	1.4
--------------------------	-----	-----

Chromatogram Pattern: Discrete Peaks

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	8/20/92
Date Analyzed:	8/20/92
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

Nokowhat D. Herrera
Project Manager



SEQUOIA ANALYTICAL

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

Gettler Ryan/Geostrategies
2150 W. Winton Avenue
Hayward, CA 94545
Attention: Cylda Galantine

Client Project ID: 7610.05, Shell, Oakland

QC Sample Group: 208-2969

Reported: Aug 25, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Diesel
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	R.Geckler	R.Geckler	R.Geckler	R.Geckler	M.Tran
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Aug 20, 1992	Aug 20, 1992	Aug 20, 1992	Aug 20, 1992	Aug 20, 1992
QC Sample #:	GBLK082092	GBLK082092	GBLK082092	GBLK082092	DBLK082092
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60	15
Conc. Matrix Spike:	0.17	0.18	0.17	0.49	13
Matrix Spike % Recovery:	95	90	85	82	87
Conc. Matrix Spike Dup.:	0.18	0.18	0.17	0.50	12
Matrix Spike Duplicate % Recovery:	90	90	85	83	80
Relative % Difference:	5.7	0.0	0.0	2.0	8.0

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



Site Address: 2800 Telegraph Ave Oakland

WIC#: 204-5508-2303

Shell Engineer: Stain Roller Phone No. 685-3850
Fax # (510) 685-3943

Consultant Name & Address: Gettler-Ryan / GeoStrategies
7610.05 2150 W. Winton Ave.
Hayward, California 94545

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

Comments: Run O&G on 5 Day TAT

Sampled By: _____
Printed Name: _____

Sample ID	Date	Soil	Water	Air	No. of conds.
<u>SWS-3A-D</u>	<u>8-18-92</u>	<u>X</u>			<u>4</u>

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
<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input type="checkbox"/>	5411	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
<u>254</u>		<u>Y</u>	<u>2082969</u>	

Relinquished By (signature): Clyde Galantini
Printed name: Clyde Galantini
Date: 8/18/92
Time: 16:00

Relinquished By (signature): Rebekah J. Harper
Printed name: Rebekah J. Harper
Date: 8/18/92
Time: 16:30

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

Received (signature): Rebekah J. Harper
Printed name: Rebekah J. Harper
Date: 8/18/92
Time: 16:00

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

Received (signature): Tim Costello
Printed name: Tim Costello
Date: 8-18-92
Time: 16:30

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



SEQUOIA ANALYTICAL

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

RECEIVED

AUG 21 1992

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

GETTLER-RYAN INC.
GENERAL CONTRACTOR

Project: 7610.05, Shell, Oakland

Enclosed are the results from 1 soil sample received at Sequoia Analytical on August 18, 1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2082969	Soil Composite, SWS-3A-D	8/18/92	SM 5520 E&F (Gravimetric)

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



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: Clyde Galantine

Client Project ID: 7610.05, Shell, Oakland
Matrix Descript: Soil Composite
Analysis Method: SM 5520 E&F (Gravimetric)
First Sample #: 208-2969

Sampled: Aug 18, 1992
Received: Aug 18, 1992
Extracted: Aug 19, 1992
Analyzed: Aug 19, 1992
Reported: Aug 20, 1992

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg
208-2969	SWS-3A-D	98

Detection Limits:

50

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

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

Client Project ID: 7610.05, Shell, Oakland

Attention: Clyde Galantine

QC Sample Group: 208-2969

Reported: Aug 20, 1992

QUALITY CONTROL DATA REPORT

ANALYTE	Oil & Grease
---------	-----------------

Method: SM5520E&F
 Analyst: M.Shkidt
 Reporting Units: mg/kg
 Date Analyzed: Aug 19, 1992
 QC Sample #: BLK081992

Sample Conc.: N.D.

Spike Conc. Added: 1000

Conc. Matrix Spike: 780

Matrix Spike % Recovery: 78

Conc. Matrix Spike Dup.: 720

Matrix Spike Duplicate % Recovery: 72

Relative % Difference: 8.0

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



Site Address: 2800 Telegraph Ave Oakland

WICH#: 204-5508-2303

Shell Engineer: Stan Roller Phone No. 685-3850
Fax # (510) 685-3943

Consultant Name & Address: Gettler-Ryan / GeoStrategies
7610.05 2150 W. Winton Ave.
Hayward, California 94545

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

Comments: Run O&G on 5 Day TAT.

Sampled By:
Printed Name:

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
X	X	X			X

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
Quarterly Monitoring <input type="checkbox"/>	5461	24 hours <input type="checkbox"/>
Site Investigation <input 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.

Sample ID	Date	Soil	Water	Air	No. of conis.
<u>SWS-3A-70</u>	<u>8-18-92</u>	<u>X</u>			<u>4</u>

Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
<u>274</u>		<u>Y</u>	<u>2082969</u>	

Relinquished By (signature): [Signature] Printed name: Clyde Galantini

Relinquished By (signature): [Signature] Printed name: Rebekah J. Harper

Relinquished By (signature): [Signature] Printed name: Tim Castello

Date: 8-18-92 Received (signature): [Signature]

Date: 8/18/92 Received (signature): [Signature]

Date: Received (signature): [Signature]

Printed name: Rebekah J. Harper

Printed name:

Printed name: Tim Castello

Date: 8/18/92

Date:

Date: 8-18-92

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