ENVIRONMENTAL RESOLUTIONS, INC.

August 20, 1998
ERI 200912.R01

Ms. Marla D. Guensler
Exxon Company, U.S.A.
P.O. Box 4032
Concord, California 94524-4032

Subject: Environmental Activities at Former Exxon Service Station 7-0236, 6600 East 14th Street, Oakland, California.

Ms. Guensler:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) performed environmental work related to the removal of hydrocarbon-impacted soil at the subject site. ERI performed field activities to remove up to 350 milligrams per kilograms (mg/Kg) of total purgeable petroleum hydrocarbons as gasoline (TPPHg) in soil adjacent to former dispenser locations after the removal of underground storage tanks (USTs), associated product lines, dispensers and hoists in December 1996.

Additionally, ERI performed an environmental investigation at the property located at 6630 East 14th Street, Oakland, California. This work was performed as a followup to a geophysical investigation performed at this property. The purpose of field activities was to investigate three magnetic anomalies found during the geophysical investigation.

BACKGROUND

Site Description

The site is on the northeastern side of East 14th Street between Havenscourt Boulevard and 66th Avenue in Oakland, California, at an elevation of approximately 20 feet above mean sea level, as shown on the Site Vicinity Map (Plate 1). The location of former site facilities including the service station building, dispenser islands, and USTs are shown on the Generalized Site Plan (Plate 2). The area surrounding the site is occupied by mixed residential and small business developments. Havenscourt Junior High School is located south-southeast of the site, across East 14th Street.

Previous Work

Environmental field activities began in March 1991 with the installation of three groundwater monitoring wells. Subsequent to the initial field investigation, four additional groundwater monitoring wells were installed in March 1992 and three vapor extraction wells were installed in November 1993. Exxon initiated quarterly groundwater monitoring and sampling at the site in January 1992.

RESNA Industries, Inc. (RESNA) performed a vapor extraction test and step drawdown test at the site in December 1993 (RESNA 1994). RESNA determined that vapor-extraction and groundwater

74 Digital Drive, Suite 6, Novato, California 94949 415-382-9105 (FAX 415-382-1856)
Lake Forest • Novato • Seattle

pump and treat technologies were not feasible remedial alternatives for the site.

In February 1996, Exxon submitted a Corrective Action Plan (CAP) for the subject site (ERI 1996). The CAP recommended passive bioremedation be utilized as a remedial alternative at the site. This recommendation was based on fate and transport analysis of soil and groundwater conditions and hydrocarbon concentrations, subsurface lithology, and a letter dated March 7, 1994, from the California Regional Water Quality Control Board, San Francisco Bay Region which agreed with earlier findings by RESNA on remedial alternatives.

In December 1996, Exxon demolished the existing station and removed three fuel USTs, one 550-gallon used-oil UST, associated product lines and dispensers, and two hoists. Soil samples were collected by ERI throughout field activities. Results of soil sampling indicated residual petroleum hydrocarbons as diesel and gasoline were present beneath two dispensers. Appendix A contains the concentrations of petroleum hydrocarbons in soil and locations of soil samples in Table 2 and Plate 2, respectively, from ERI's March 5, 1997, report *Removal of Hoists, Underground Storage Tanks, Product Lines, and Dispensers at Former Exxon Service Station 7-0236, 6630 East 14th Street, Oakland, California.* (Note: Address is incorrectly stated as 6630 East 14th Street; actual address of subject site is 6600 East 14th Street.)

In January 1997, ERI installed groundwater monitoring well MW8 towards the eastern property boundary of the subject site. ERI detected a concentration of TPPHg at 22 mg/Kg in the soil sample from the borehole collected at 10 feet bgs. ERI also properly destroyed MW1 and MW7, located at 6630 East 14th Street and vapor extraction wells VE1 through VE3, which were located at the subject site.

In March 1997, ERI subcontracted J.R. Associates of San Jose, California to perform a geophysical investigation of the property at 6630 East 14th Street, adjacent to the subject site. The results of the investigation indicate three magnetic anomalies existed at this property. Appendix B contains a map showing the locations of the magnetic anomalies from J.R. Associates' *Geophysical Investigation at the Former Exxon Station, No. 7-0236 6630 East 14th Street, Oakland, California.* (Note: Address is incorrectly stated as 6630 East 14th Street; actual address of subject site is 6600 East 14th Street. The geophysical investigation took place at 6630 East 14th Street.)

FIELD WORK

Excavation Activities

In December 1997, ERI over excavated approximately 197 tons of soil from beneath the former dispenser areas (D2 and D6) and adjacent to monitoring well MW8. Soil was excavated to a depth of approximately 10 feet below ground surface (top of groundwater). ERI collected soil samples from the limits of the excavations. The limits of the over excavation and location of the soil samples are shown on Plate 2. ERI's field procedures for over excavation and soil sampling is included as Attachment C.

In January 1998, ERI hand augered two borings (B1 and B2) on the property located at 6630 East 14th Street (Plate 2). The purpose of the hand augers was to determine the lateral extent of

petroleum-impacted soil east of D6. ERI collected soil samples at six feet bgs. ERI subsequently excavated approximately 151 tons of soil in the process of excavating to the limits of the two borings in April 1998. ERI backfilled the excavation with clean engineered fill. All over excavation areas were backfilled with clean engineered fill. ERI subcontracted a geotechnical firm to perform compaction testing of the backfilled material. Results of compaction testing is included as Atttachement D.

Followup to Geophysical Survey

In May 1997, ERI performed field activities at 6630 East 14th Street, Oakland, California. ERI performed the excavation of test pits (probing) in two areas where magnetic anomalies were detected. The third magnetic anomaly area was located adjacent to the eastern property boundary and was not probed due the proximity to the sidewalk. Excavation activities consisted of using a backhoe to dig approximately three feet wide, three feet long and eight feet deep at each location. No abandoned USTs were located at 6630 East 14th Street. Attachment E contains Plate 2 from ERI's letter *Address Clarification and Geophysical Investigation at 6630 East 14th Street, Oakland, California* dated July 3, 1997, which shows the approximate locations of the probing.

UST later found.

LABORATORY ANALYSES

Soil samples collected from the over excavation at the subject site were submitted under Chain of Custody Record to Sequoia Analytical Laboratories (Sequoia) (California State Certification Number 1210) in Redwood City, California. The analytical results and laboratory test methods are summarized in Table 1. Residual gasoline and diesel-range hydrocarbons in the vicinity of the former dispensers have been removed to less than 13 mg/Kg and 25 mg/Kg, respectively. Copies of the laboratory reports and chain of custody records are attached (Attachment F).

SAMPLING AND DISPOSAL OF STOCKPILED SOIL

Soil removed from the over excavations was placed in two on-site stockpiles and covered with visqueen. ERI's representative collected composite soil samples from these stockpiles for laboratory analysis. Composite soil samples collected from the stockpiles were submitted under chain of custody protocol to Sequoia. The analytical results and laboratory test methods are summarized in Table 2. Copies of the chain of custody records are attached (Attachment F).

At Exxon's request, Dillard Trucking of Byron, California, transported and disposed approximately 348 tons of stockpiled soil at the BFI landfill in Livermore, California. Soil was transported on two different dates, approximately 197 tons were transported on January 30, 1998, and approximately 151 tons were transported on July 23, 1998. Soil disposal documentation is attached (Attachment G).

DISCUSSION

The results of ERI's field activities and laboratory analyses indicate the following:

- Approximately 348 tons of soil were over excavated in the location of the former dispenser area.

- Soil samples collected after over excavation activities indicate petroleum hydrocarbons have been removed from soil in the area of former dispensers.

- No USTs were located in the areas identified as magnetic anomalies at 6630 East 14th Street.

LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental practice in California at the time this investigation was performed. This investigation was conducted solely for the purpose of removing residual hydrocarbons in soil. No soil engineering or geotechnical references are implied or should be inferred. Evaluation of the geologic conditions at the site for the purpose of this investigation is made from a limited number of observation points.

Please call (415)-382-5985 if you have any questions regarding the information in this report.

Sincerely,
Environmental Resolutions, Inc.

Tracy A. Faulkner
Program Manager

Mark S. Dockum
R.G. 4412
C.E.G. 1675

Attachments: Table 1: Sample Analyses Results - Over Excavation of Soil
Table 2: Sample Analyses Results - Stockpiled Soil from Over Excavation

Plate 1: Site Vicinity Map
Plate 2: Generalized Site Plan

Attachment A: Removal of Hoists, Underground Storage Tanks, Product Lines, and Dispensers, Former Exxon Station, No. 7-0236 6630 Est 14th Street, Oakland, California, Table 2 and Plate 2
Attachment B: Geophysical Investigation at the Former Exxon Station, No. 7-0236 6630 East 14th Street, Oakland, California, Drawings 2 and 3
Attachment C: Field Procedures
Attachment D: Compaction Testing
Attachment E: Address Clarification and Geophysical Investigation at 6630 East 14th Street, Oakland, California, Plate 2
Attachment F: Laboratory Analyses and Chain Of Custody Records
Attachment G: Soil Disposal Documentation

REFERENCES

RESNA Industries, Inc. February 14, 1994. Supplemental Environmental Investigation at Exxon Service Station 7-0236, 6630 East 14th Street, Oakland, California.

Environmental Resolutions Inc. February 27, 1996. Corrective Action Plan, Former Exxon Service Station 7-0236, 6630 East 14th Street, Oakland, California.

Environmental Resolutions Inc. March 5, 1996. Underground Storage Tanks, Product Lines, and Dispensers, Former Exxon Station, No. 7-0236 6630 East 14th Street, Oakland, California.

Environmental Resolutions Inc. March 17, 1996. Geophysical Investigation at 6630 East 14th Street, Oakland, California.

Environmental Resolutions Inc. July 3, 1997. Address Clarification and Geophysical Investigation at 6630 East 14th Street, Oakland, California.

United States Geological Survey. 1980. Oakland East and San Leandro, California 7.5-Minute Topographic Quadrangle Maps.

TABLE 1
SAMPLE ANALYSES RESULTS
OVER EXCAVATION OF SOIL
DECEMBER 1997
Former Exxon Service Station 7-0236
6600 East 14th Street
Oakland, California
(Page 1 of 2)

Sample Number	TPPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TEPHd
S-5-D6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-9-D6	800	0.62	<0.50	<0.50	<0.50	620
S-8.5-D6-3E	1.9	<0.0050	<0.0050	<0.0050	0.021	<1.0
S-8-D6-2N	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	1.0
S-7.5-D6-1W	1.1	<0.0050	<0.0050	<0.0050	<0.0050	1.5
S-9.5-D2N	3.5	<0.0050	<0.0050	<0.0050	0.012	5.6
S-10-D2S	13	<0.0050	0.037	<0.0050	0.075	7.5
S-7.0-D2W	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	5.1
S-7.0-D2E	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	25
Hand Auger						
S-6-B1	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-6-B2	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	1.0

Notes:
Soil results in milligrams per kilograms (mg/Kg)

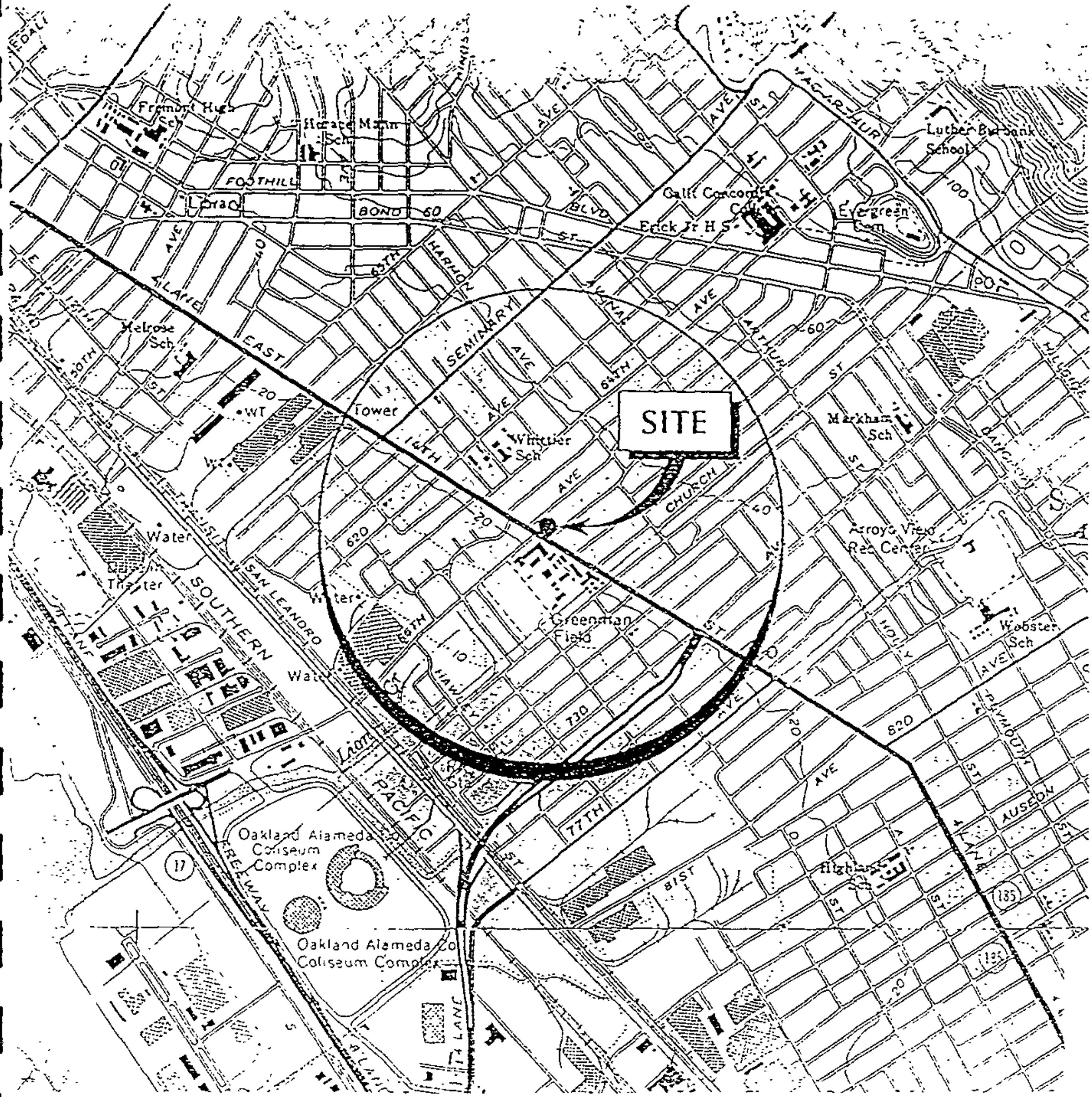
<	=	Less than detection limit established by laboratory.
TPPHg	=	Total purgeable petroleum hydrocarbons as gasoline analyzed using EPA method 8015 (modified)
BTEX	=	Benzene, toluene, ethylbenzene, total xylene isomers analyzed using EPA method 8020
MTBE	=	Methyl tertiary -butyl ether analyzed using EPA method 8020
TEPHd	=	Total extractable petroleum hydrocarbons as diesel using EPA method 8015 (modified)

TABLE 2
SAMPLE ANALYSES RESULTS
STOCKPILED SOIL FROM OVER EXCAVATION
DECEMBER and APRIL 1997
Former Exxon Service Station 7-0236
6600 East 14th Street
Oakland, California
(Page 1 of 2)

Sample Number	TPPHg	Benzene	Toluene	Ethyl benzene	Xylene	TEPHd	Total Lead
December 1997							
S-SP-1-(A-D)	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	18	27
		Additional Analyses: HVOC's = ND					
S-SP-2-(A-D)	59	0.12	0.75	0.98	5.5	39	18
		Additional Analyses: HVOC's = ND					
S-SP-2-(E-H)	180	<0.050	0.078	0.32	2.0	54	29
		Additional Analyses: HVOC's = ND					
S-SP-3-(A-D)	120	0.053	0.77	0.88	5.7	40	15
		Additional Analyses: HVOC's = ND					
S-SP-3-(E-H)	150	<0.050	0.32	0.38	2.8	23	9.4
		Additional Analyses: HVOC's = ND					
April 1998							
SP-2-(1)	7.2	0.0094	0.0062	0.011	0.048	23	16
		Additional Analyses: HVOC's = ND					
SP-2-(2)	8.2	<0.0050	0.0054	0.011	0.054	44	54
		Additional Analyses: HVOC's = ND					
SP-2-(3)	370	0.86	0.47	1.5	1.5	110	6.9
		Additional Analyses: HVOC's = ND					
SP-2-(4)	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	41	12
		Additional Analyses: HVOC's = ND					

Notes:
Results in milligrams per kilograms (ml/Kg) unless otherwise noted.

<	=	Less than detection limit established by laboratory.
TPPHg	=	Total purgeable petroleum hydrocarbons as gasoline analyzed using EPA method 8015 (modified).
BTEX	=	Benzene, toluene, ethylbenzene, total xylene isomers analyzed using EPA method 8020.
MTBE	=	Methyl tert-butyl ether analyzed using EPA method 8020.
TEPHd	=	Total extractable petroleum hydrocarbons as diesel using EPA method 8015 (modified).
HVOC's	=	Halogenated volatile organic compounds using EPA method 8010.
Total Lead	=	Total lead analyzed using EPA method 6010.
Metals	=	Analyzed using EPA method 6010.



20090001

N

APPROXIMATE SCALE

0 1/2 1

MILE

Source. U.S.G.S. 7.5 minute topographic quadrangle map Oakland East and San Leandro Calif. 1980

ERI ENVIRONMENTAL RESOLUTIONS, INC.

PROJECT ERI 2009

SITE VICINITY MAP

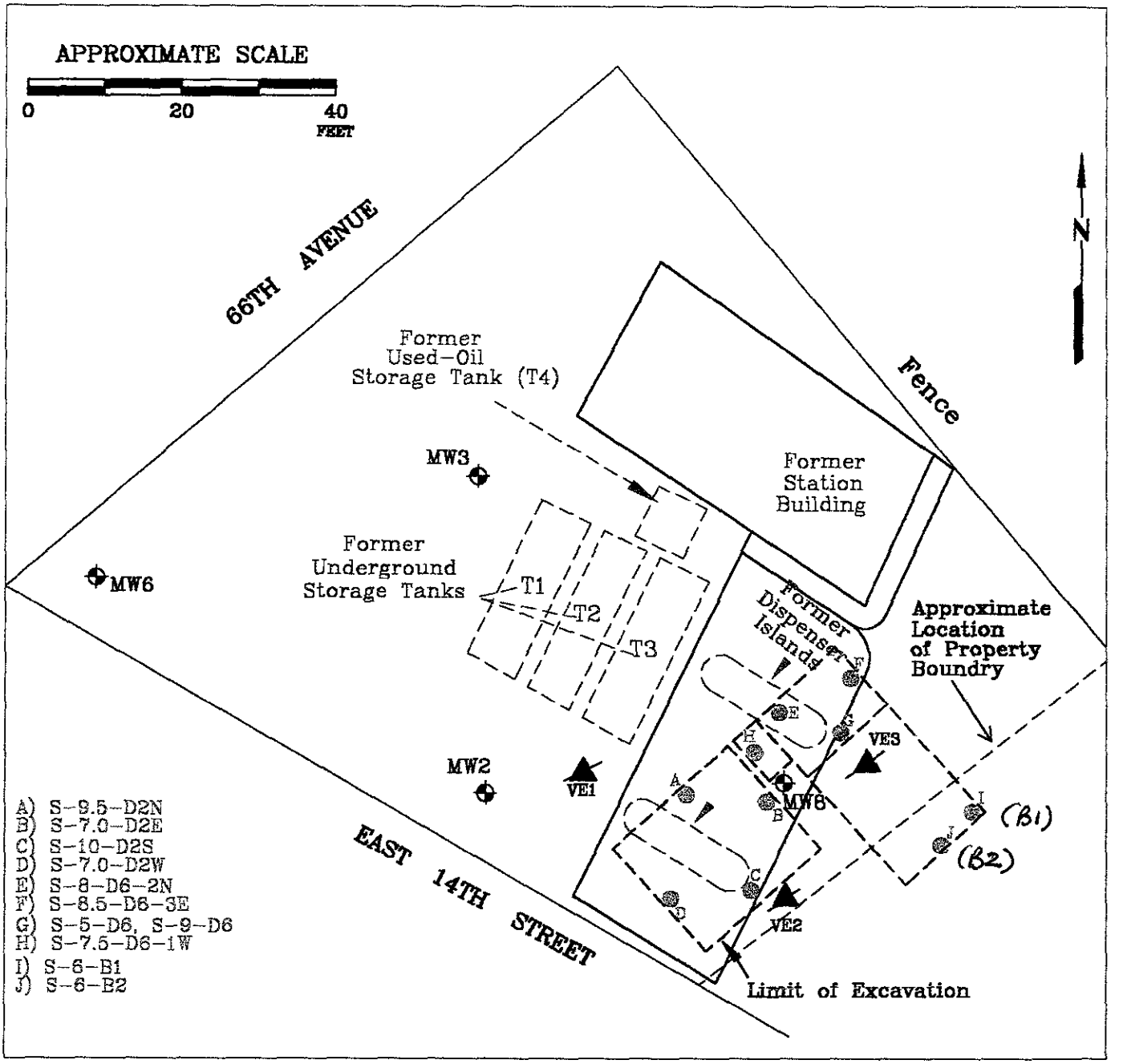
FORMER EXXON SERVICE STATION 7-0236

6600 East 14th Street

Oakland, California

PLATE

1



FN 2009002A

EXPLANATION

MW8 — Groundwater Monitoring Well

[ ] — Limits of Over Excavation

VE3 — Destroyed Vapor Well

J — Soil Sample

SOURCE: Modified from a map provided by Exxon USA

ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-0236
6600 East 14th Street
Oakland, California

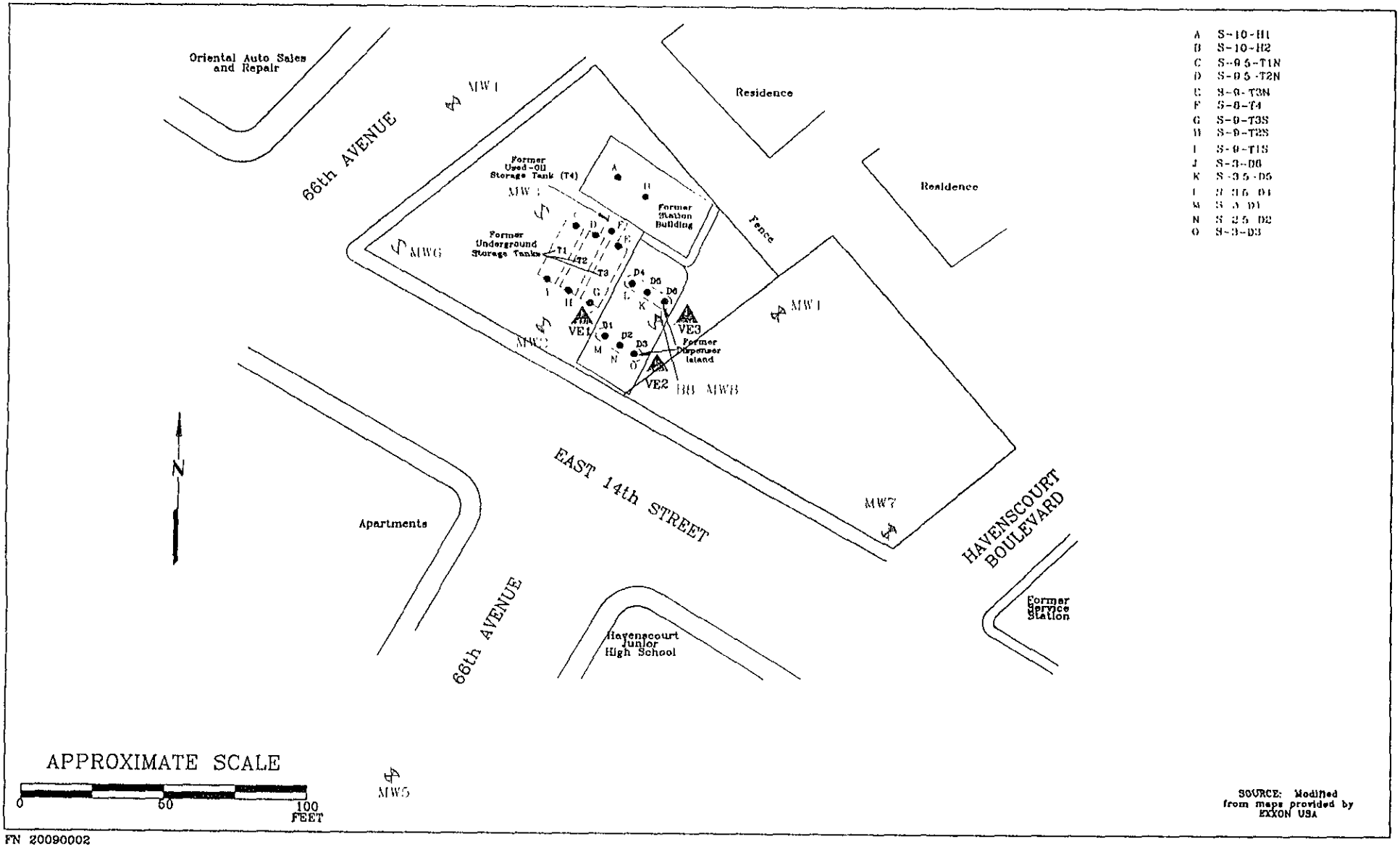
PROJECT NO. 2009

PLATE 2

August 19, 1998

ATTACHMENT A

Removal of Hoists, Underground Storage Tanks, Product Lines, and Dispensers, Former Exxon Station, No. 7-0236 6630 Est 14th Street, Oakland, California, Table 2 and Plate 2



FN 20090002

ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

FORMER
EXXON SERVICE STATION 7-0236
6630 East 14th Street
Oakland, California

EXPLANATION

- MW8 — Groundwater Monitoring Well
- Groundwater Monitoring Well (Destroyed)
- VE3 — Vapor Extraction Well (Destroyed)
- DB/MW8 — Soil Boring/Groundwater Monitoring Well
- Soil Sample Location
- Soil-Depth-Dispenser (T = Tank, H = Hoist)

PROJECT NO. 2009

PLATE 2

DATE. 2/11/97

ATTACHMENT B

Geophysical Investigation at the Former Exxon Station, No. 7-0236 6630
East 14th Street, Oakland, California, Drawings 2 and 3

J R ASSOCIATES

Engineering Geophysics
1886 Emory Street
San Jose, CA 95126
(408) 293-7390

GEOPHYSICAL INVESTIGATION AT THE FORMER EXXON STATION, NO: 7-0236 6630 EAST 14TH STREET OAKLAND, CALIFORNIA

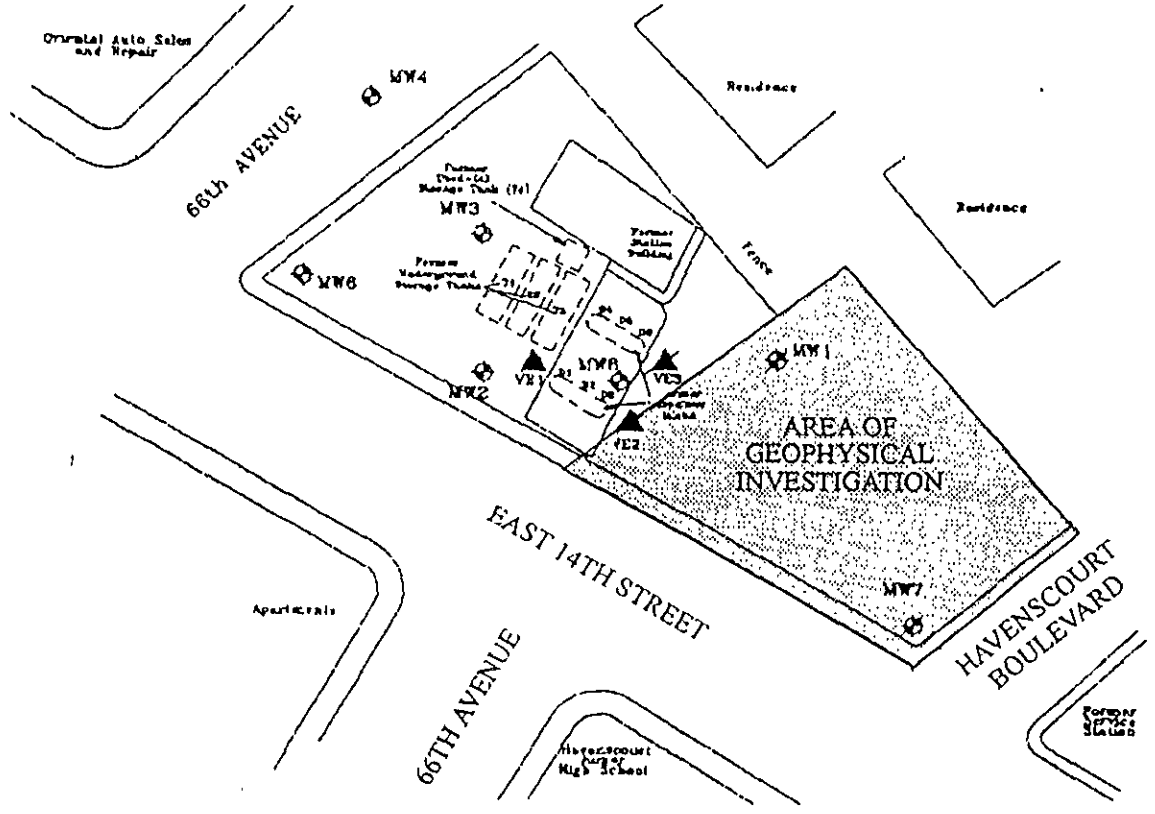
March 3, 1997

For

Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949

By

James Rezowalli, GP-921



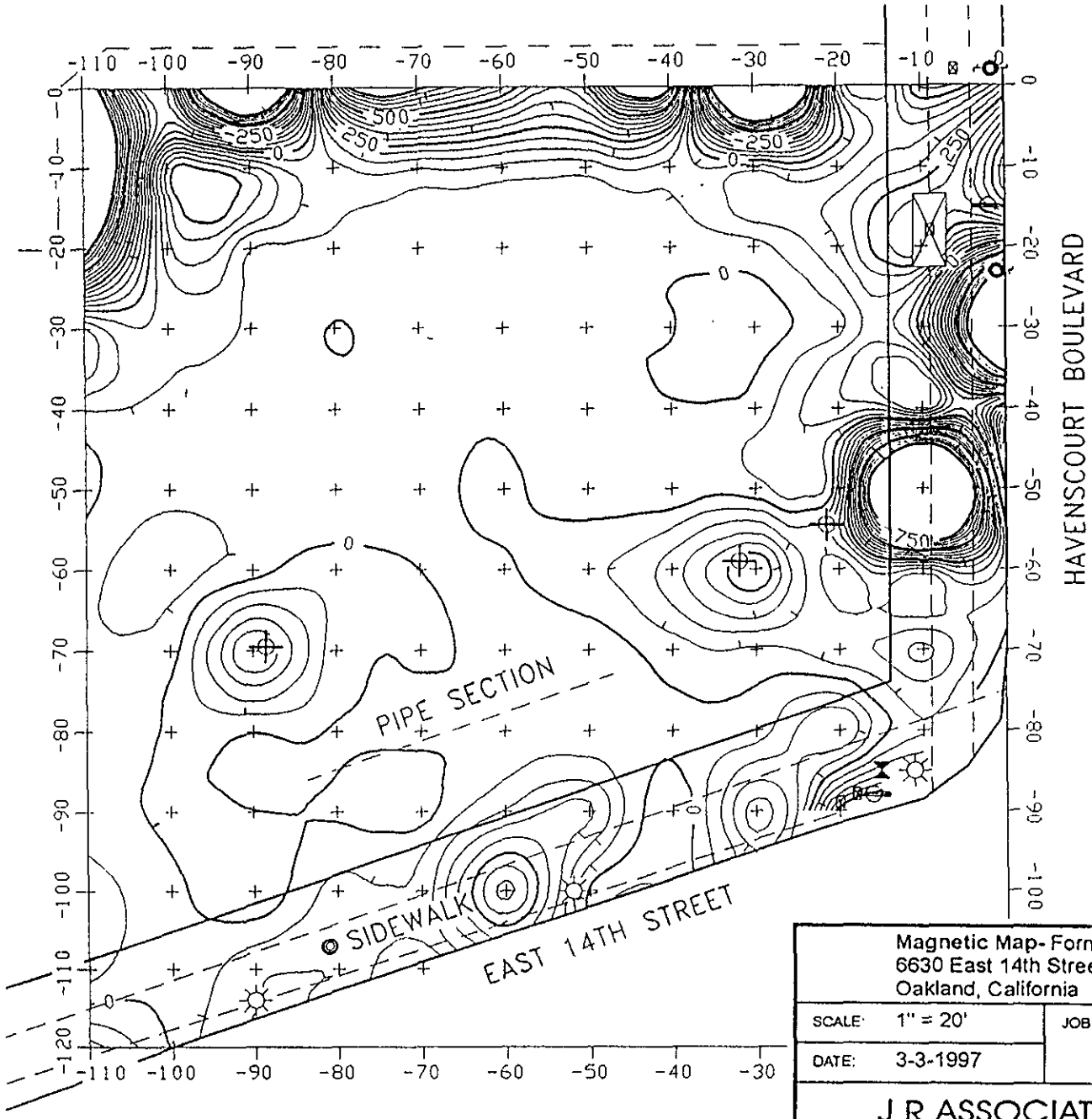
Note: Diagram based on site map provided by Environmental Resolutions Incorporated.

Site Map- Former Exxon Station 7-0236
6630 East 14th Street
Oakland, California

SCALE	See Diagram	JOB NUMBER.	DRAWN BY J.J.R.
DATE:	3-3-1997	103127-97	REVISED:

J R ASSOCIATES Civil and Environmental Geophysics
1886 Emory Street, San Jose, CA (408) 293-7390

DRAWING NUMBER: 2



EXPLANATION:

- MANHOLE COVER OR DRAIN
- CHRISTY BOX
- LIGHT
- POST OR SIGN
- POWER POLE
- VALVE
- STAKED ANOMALY
- BURIED PIPE
- FENCE
- MAGNETIC DATA POINT
- MAGNETIC CONTOUR

Magnetic Map- Former Exxon Station 7-0236
6630 East 14th Street
Oakland, California

SCALE: 1" = 20'	JOB NUMBER		DRAWN BY J.J.R.
DATE: 3-3-1997		103127-97	REVISED:

J R ASSOCIATES Civil and Environmental Geophysics
1886 Emory Street, San Jose, CA (408) 293-7390

DRAWING NUMBER: 3

ATTACHMENT C

Field Procedures

FIELD PROCEDURES

Safety Plan

This plan describes the basic safety requirements for the subsurface environmental investigation related to excavation of hydrocarbon-impacted soil at the site. The Site Safety Plan is applicable to personnel of ERI and to subcontractors of ERI. Personnel scheduled to work at the site were briefed on the contents of the Site Safety Plan before work began. A copy of the Site Safety Plan was kept at the work site and was available for reference by appropriate parties during work at the site. The representative from ERI was the Site Safety Officer onsite.

Sampling Sidewalls of Excavations

The soil samples collected from the sidewalls of the excavation were obtained by driving a hand-operated percussion sampler fitted with a clean brass sleeve into the soil immediately after it was brought to the surface in the backhoe bucket. The sleeve was removed from the sampler and sealed promptly with Teflon® tape and plastic caps.

A photoionization detector (PID) was used to evaluate the presence of hydrocarbon vapors in soil samples. Field instruments such as the PID are useful for indicating relative levels of hydrocarbon vapors, but do not detect the concentration of hydrocarbons present with the same precision as laboratory analyses.

Sampling of Stockpiled Soil

These samples were collected and analyzed to characterize the soil for disposal. Each of these soil samples was collected by driving a hand-operated percussion soil-sampling device lined with a clean brass sleeve into the soil after approximately 1 foot of soil was removed from the stockpile or roll-off bin. Each sample sleeve was removed from the sampler and promptly sealed with Teflon® tape and plastic caps. The sample was then labeled and placed in iced storage. Four samples were collected for approximately every 100 cubic yards of stockpiled soil; each group of four samples was composited into one soil sample by the analytical laboratory.

Sample Labeling and Handling

The soil samples selected for possible laboratory analysis were removed from the sampler and quickly sealed in their brass sleeves with Teflon® tape and plastic caps. The respective sample containers were labeled in the field with the job number, sample location and depth, and date, and promptly placed in iced storage for transport to the laboratory. Chain of Custody Records were initiated in the field by the geologist and accompanied the samples to a laboratory certified by the State of California to perform the analyses requested.

ATTACHMENT D

Compaction Testing

WAYNE TING & ASSOCIATES, INC.

MOISTURE-DENSITY TEST

PROJ. NO. _____
LAB. NO. _____
DATE _____
TESTED BY _____
SHEET _____ OF _____

6600 E. 14th. Street, Oakland
maximum dry density: 121.1 pcf
f = _____ optimum Moisture: 8.8%

Sample No.	1-1 @ 1.5'	1-2 @ 6.0'	2-1 @ 1.0'	2-2 @ 4.0'			
Ht. of Sample	6"	6"	6"	6"			
Tare No.	806	605	814	803			
Gross Wet Wt.	938.50	925.98	917.22	911.05			
Gross Dry Wt.	850.55	831.31	896.18	847.58			
Tare Wt.	8.05	8.05	8.04	8.07			
Net Dry Wt.	842.80	823.26	888.14	839.51			
Wt. of Water	87.65	94.67	79.04	63.70			
% Moisture	10.4	11.5	8.9	7.6			
Dry Density	120.8	118.0	124.3	119.8			
Relative Compaction %	99.6	97.4	102.6	98.9			

DESCRIPTION

$$\gamma_d = \frac{Wds\,(g) \cdot f}{L\,(in)}$$

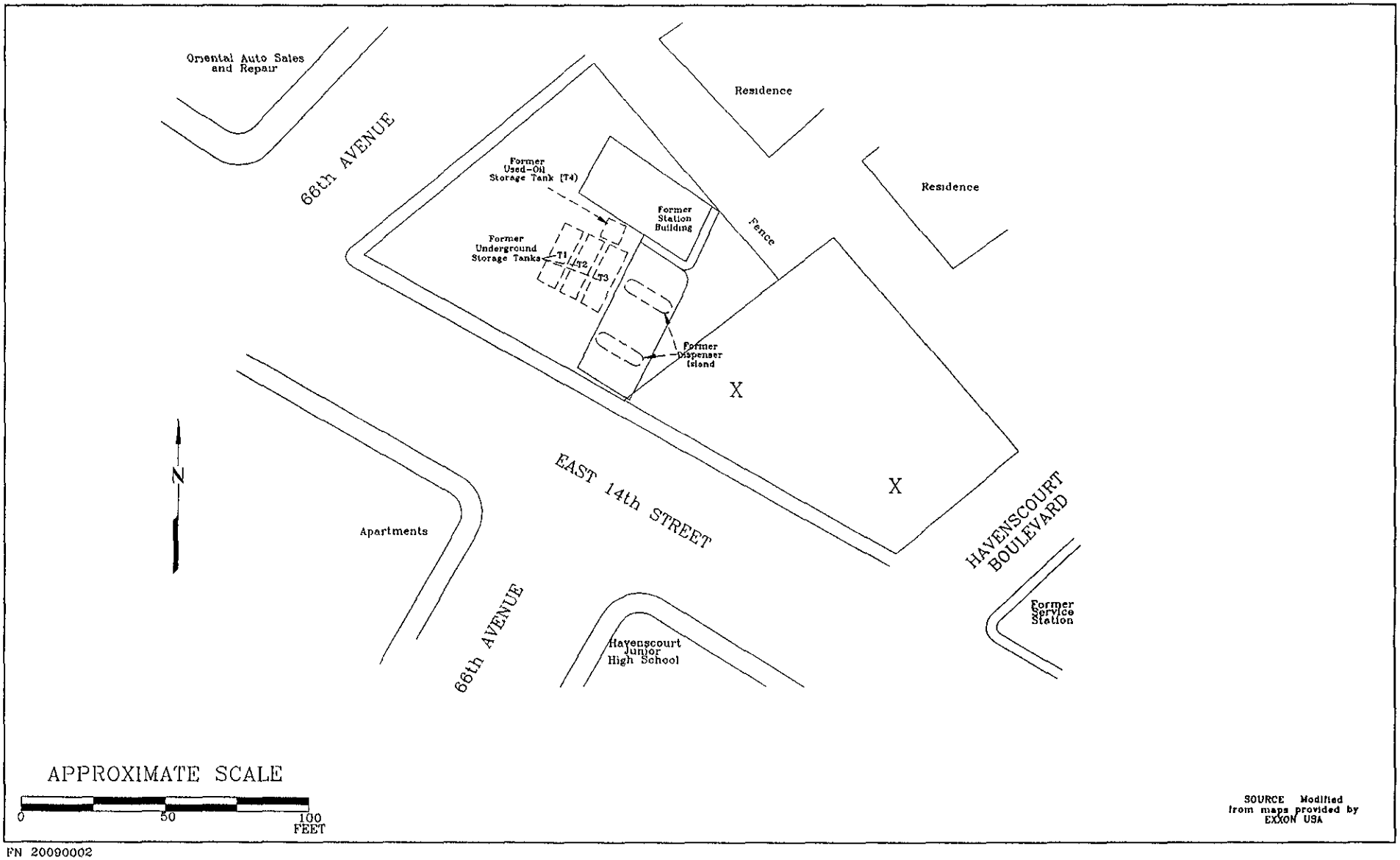
Density Factors

Liners: (1.9375" Ø) f = 1.295
(2.375" Ø) f = 0.86

Shelby: (1.870" Ø) f = 1.388

ATTACHMENT E

Address Clarification and Geophysical Investigation at 6630 East 14th Street, Oakland, California, Plate 2



FN 20090002

ERI ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

FORMER
EXXON SERVICE STATION 7-0236
6600 East 14th Street
Oakland, California

EXPLANATION

X Approximate probing location

PROJECT NO.
2009

PLATE
2

ATTACHMENT F

Laboratory Analysis and Chain of Custody Records

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-9.5-D2N
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9712209-01

Sampled: 12/03/97
Received: 12/04/97
Extracted: 12/05/97
Analyzed: 12/10/97
Reported: 12/11/97

C Batch Number: GC1204970HBPEXB
strument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	5.6
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	96

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

SEQUOIA ANALYTICAL - ELAP #1210

RECEIVED
DEC 16 1997

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-9.5-D2N
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712209-01

Sampled: 12/03/97
Received: 12/04/97
Extracted: 12/08/97
Analyzed: 12/09/97
Reported: 12/11/97

QC Batch Number: GC120897BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**3.5**
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	**0.0050**	**0.012**
Chromatogram Pattern:		
Unidentified HC		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	101
4-Bromofluorobenzene	60	140	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-10.0-D2S
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9712209-02

Sampled: 12/03/97
Received: 12/04/97
Extracted: 12/05/97
Analyzed: 12/10/97
Reported: 12/11/97

QC Batch Number: GC1204970HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	7.5
Chromatogram Pattern: **Unidentified HC**		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-10.0-D2S
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712209-02

Sampled: 12/03/97
Received: 12/04/97
Extracted: 12/08/97
Analyzed: 12/09/97
Reported: 12/11/97

QC Batch Number: GC120897BTEXEXA
Instrument ID: GCHP1

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**13**
Benzene	0.0050	N.D.
Toluene	**0.0050**	**0.037**
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	**0.0050**	**0.075**
Chromatogram Pattern:		
Weathered Gas		**>C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90
4-Bromofluorobenzene	60	140	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-7.0-D2W
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9712209-03

Sampled: 12/03/97
Received: 12/04/97
Extracted: 12/05/97
Analyzed: 12/10/97
Reported: 12/11/97

C Batch Number: GC1204970HBPEXB
strument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	5.1
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	92

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
oject Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-7.0-D2W
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712209-03

Sampled: 12/03/97
Received: 12/04/97
Extracted: 12/08/97
Analyzed: 12/09/97
Reported: 12/11/97

QC Batch Number: GC120897BTEXEXA
Instrument ID. GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	126
4-Bromofluorobenzene	60	140	103

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-7.0-D2E
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9712209-04

Sampled: 12/03/97
Received: 12/04/97
Extracted: 12/05/97
Analyzed: 12/10/97
Reported: 12/11/97

QC Batch Number: GC1204970HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	25
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	207 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-7.0-D2E
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712209-04

Sampled: 12/03/97
Received: 12/04/97
Extracted: 12/08/97
Analyzed: 12/09/97
Reported: 12/11/97

QC Batch Number: GC120897BTEXEXA
Instrument ID: GCHP1

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94
4-Bromofluorobenzene	60	140	92

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9712209 01-04

Reported: Dec 13, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1204970HBPEXB
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3550/DHS
Analyst:	G.Fish
MS/MSD #:	971208701
Sample Conc.:	510
Prepared Date:	12/4/97
Analyzed Date:	12/8/97
Instrument I.D.#:	GCHP5A
Conc. Spiked:	25 mg/Kg
Result:	430
MS % Recovery:	-320
Dup. Result:	370
MSD % Recov.:	-560
RPD:	15
RPD Limit:	0-50

LCS #:	BLK120597
Prepared Date:	12/5/97
Analyzed Date:	12/10/97
Instrument I.D.#:	GCHP5B
Conc. Spiked:	25 mg/Kg
LCS Result:	20
LCS % Recov.:	80

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9712209 01-04

Reported: Dec 13, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC120897BTEXEXA	GC120897BTEXEXA	GC120897BTEXEXA	GC120897BTEXEXA	GC120897BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. McLachlan	M. McLachlan	M. McLachlan	M. McLachlan	M. McLachlan
MS/MSD #:	971228301	971228301	971228301	971228301	971228301
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/8/97	12/8/97	12/8/97	12/8/97	12/8/97
Analyzed Date:	12/8/97	12/8/97	12/8/97	12/8/97	12/8/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/kg	1.2 mg/Kg
Result:	0.21	0.21	0.21	0.66	1.1
MS % Recovery:	105	105	105	110	92
Dup. Result:	0.20	0.20	0.21	0.64	1.1
MSD % Recov.:	100	100	105	107	92
RPD:	4.9	4.9	0.0	3.1	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK120897	BLK120897	BLK120897	BLK120897	BLK120897
Prepared Date:	12/8/97	12/8/97	12/8/97	12/8/97	12/8/97
Analyzed Date:	12/8/97	12/8/97	12/8/97	12/8/97	12/8/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/kg	1.2 mg/Kg
LCS Result:	0.23	0.23	0.23	0.70	1.2
LCS % Recov.:	115	115	115	117	100
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.
P.O. Box 2180, Houston, TX 77002-7426

97122 09

CHAIN OF CUSTODY

Consultant's Name: ENVIRONMENTAL RESOLUTIONS, INC.			Page 1 of 1
Address: 74 DIGITAL DRIVE, SUITE 6 NOVATO CA 94949			Site Location: 6600 E. 14TH STREET
Project #:	Consultant Project #: 200912.1		Consultant Work Release #: 19432502
Project Contact: MARC A BRIGGS	Phone #: 415-382-5991		Laboratory Work Release #:
EXXON Contact: MARLA D. GUENSLER	Phone #: 510-246-8776		EXXON RAS #: 7-0236
Sampled by (print): MARC A BRIGGS	Sampler's Signature: Marc A. Briggs		
Shipment Method: COURIER	Air Bill #:		

TAT: ☐ 24 hr ☐ 48 hr ☒ 72 hr ☐ 96 hr ☐ Standard (10 day)

DEC 4 11

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
S-9.5-02N	12/3/97		SOIL	ICE	1	01	X	X				
S-10.0-02S	12/3/97		SOIL	ICE	1	02	X	X				
S-7.0-02W	12/3/97		SOIL	ICE	1	03	X	X				
S-7.0-02E	12/3/97		SOIL	ICE	1	04	X	X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Marc A. Briggs	12/4/97	11:40	Ray Savoy	12/4	11:40	
Ray Savoy	12/4/97					
			Ken Li Sn RWC	12/4/97	13M	

1 White - Sequoia 2 Yellow - Sequoia 3 Pink - Client

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X

Lab Proj. ID: 9712209

Received: 12/04/97

Reported: 12/11/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 12 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-8.5-D6-3E
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9712332-01

Sampled: 12/04/97
Received: 12/05/97
Extracted: 12/08/97
Analyzed: 12/10/97
Reported: 12/11/97

QC Batch Number: GC120897OHBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	82

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

RECEIVED
DEC 16 1997

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 12/04/97
74 Digital Drive , Suite 6	Sample Descript: S-8.5-D6-3E	Received: 12/05/97
Novato, CA 94949	Matrix: SOLID	Extracted: 12/09/97
	Analysis Method: 8015Mod/8020	Analyzed: 12/09/97
Attention: Marc Briggs	Lab Number: 9712332-01	Reported: 12/11/97

QC Batch Number: GC120997BTEXEXA
Instrument ID: GCHP7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**1.9**
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	**0.0050**	**0.021**
Chromatogram Pattern:		
Unidentified HC		**>C10**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	80
4-Bromofluorobenzene	60	140	86

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 12/04/97
74 Digital Drive , Suite 6	Sample Descript: S-8-D6-2N	Received: 12/05/97
Novato, CA 94949	Matrix: SOLID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/10/97
Attention: Marc Briggs	Lab Number: 9712332-02	Reported: 12/11/97

QC Batch Number: GC120897OHBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	1.0
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	91

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-8-D6-2N
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712332-02

Sampled: 12/04/97
Received: 12/05/97
Extracted: 12/09/97
Analyzed: 12/09/97
Reported: 12/11/97

QC Batch Number: GC120997BTEXEXA
Instrument ID: GCHP7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93
4-Bromofluorobenzene	60	140	81

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 12/04/97
74 Digital Drive , Suite 6	Sample Descript: S-7.5-D6-1W	Received: 12/05/97
Novato, CA 94949	Matrix: SOLID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/10/97
Attention: Marc Briggs	Lab Number: 9712332-03	Reported: 12/11/97

QC Batch Number: GC120897OHBPEXA
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	**1.5**
Chromatogram Pattern:		
Unidentified HC		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	84

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 12/04/97
74 Digital Drive , Suite 6	Sample Descript: S-7.5-D6-1W	Received: 12/05/97
Novato, CA 94949	Matrix: SOLID	Extracted: 12/09/97
	Analysis Method: 8015Mod/8020	Analyzed: 12/09/97
Attention: Marc Briggs	Lab Number: 9712332-03	Reported: 12/11/97

QC Batch Number: GC120997BTEXEXA
Instrument ID: GCHP7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**1.1**
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		
Unidentified HC		**>C10**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93
4-Bromofluorobenzene	60	140	85

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9712332 01-03
Reported: Dec 13, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1208970HBPEXA
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3550
Analyst:	G. Fish
MS/MSD #:	BLK120897
Sample Conc.:	N.D.
Prepared Date:	12/8/97
Analyzed Date:	12/9/97
Instrument I.D.#:	GCHP5A
Surr Result:	99
% Recovery:	99

An MS/MSD was extracted with this set, but the sample failed due to low surrogate recovery.

LCS #:	BLK120897
Prepared Date:	12/8/97
Analyzed Date:	12/9/97
Instrument I.D.#:	GCHP5A
Conc. Spiked:	25 mg/Kg
LCS Result:	22
LCS % Recov.:	88

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9712332 01-03

Reported: Dec 13, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC120997BTEXEXA	GC120997BTEXEXA	GC120997BTEXEXA	GC120997BTEXEXA	GC120997BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. McLachlan	M. McLachlan	M. McLachlan	M. McLachlan	M. McLachlan
MS/MSD #:	971217501	971217501	971217501	971217501	971217501
Sample Conc.:	N.D.	N.D.	N.D.	N.D	N.D.
Prepared Date:	12/9/97	12/9/97	12/9/97	12/9/97	12/9/97
Analyzed Date:	12/10/97	12/10/97	12/10/97	12/10/97	12/10/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg	1 2 mg/Kg
Result:	0.18	0.19	0 20	0.61	1.1
MS % Recovery:	90	95	100	102	92
Dup. Result:	0 17	0.18	0.18	0.56	1.0
MSD % Recov.:	85	90	90	93	83
RPD:	5.7	5.4	11	8.5	9.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK120997	BLK120997	BLK120997	BLK120997	BLK120997
Prepared Date:	12/9/97	12/9/97	12/9/97	12/9/97	12/9/97
Analyzed Date:	12/10/97	12/10/97	12/10/97	12/10/97	12/10/97
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg	1.2 mg/Kg
LCS Result:	0.21	0.22	0.23	0 70	1.2
LCS % Recov.:	105	110	115	117	100
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.
P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

Consultant's Name: ENVIRONMENTAL RESOLUTIONS, INC.			Page 1 of 1
Address: 74 DIGITAL DRIVE, SUITE G NOVATO CA 94949			Site Location: 6600 E. 14TH STREET
Project #:	Consultant Project #: 200912x		Consultant Work Release #: 194325OZ
Project Contact: MARC A. BRIGGS	Phone #: 415-382-5991		Laboratory Work Release #:
EXXON Contact: MARLA D. GOENSLER	Phone #: 510-246-8776		EXXON RAS #: 7-0236
Sampled by (print): MARC A. BRIGGS	Sampler's Signature: Marc A. Briggs		
Shipment Method: courier	Air Bill #:		

TAT: ☐ 24 hr ☐ 48 hr ☒ 72 hr ☐ 96 hr ☐ Standard (10 day)

ANALYSIS REQUIRED 9712332

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
X S-8.5-06-3E	12/4/97		Soil	ice	1	01	X	X				
X S-8-06-2W	12/4/97		Soil	ice	1	02	X	X				
X S-7.5-06-1W	12/4/97		Soil	ice	1	03	X	X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	12-5	1720	[signature] #1560 #748			
			T Parsley	12/5/97	1920	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Lab Proj. ID: 9712332

Received. 12/05/97
Reported: 12/11/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 10 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Client Proj. ID: Exxon 7-0236, 200912X
Lab Proj. ID: 9712495

Sampled: 12/05/97
Received: 12/09/97
Analyzed: see below

Attention: Marc Briggs

Reported: 12/17/97

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9712495-01 Sample Desc : SOLID,S-SP1 (A-D)				
Lead	mg/Kg	12/12/97	5.0	27
Lab No: 9712495-04 Sample Desc : SOLID,S-SP3 (A-D)				
Lead	mg/Kg	12/12/97	5.0	15
Lab No: 9712495-05 Sample Desc : SOLID,S-SP3 (E-H)				
Lead	mg/Kg	12/12/97	5.0	9.4
Lab No: 9712495-06 Sample Desc : SOLID,S-SP2 (A-D)				
Lead	mg/Kg	12/12/97	5.0	18
Lab No: 9712495-07 Sample Desc : SOLID,S-SP2 (E-H)				
Lead	mg/Kg	12/12/97	5.0	29

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

RECEIVED
DEC 29 1997

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP1 (A-D)
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9712495-01

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/11/97
Reported: 12/17/97

C Batch Number: GC1205978010EXA
strument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
Chlorobenzene	25	N.D.
Chloroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
1,1-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	N.D.
trans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl chloride	50	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	60	130	86
4-Bromofluorobenzene	60	140	79

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP1 (A-D)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9712495-01

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/11/97
Reported: 12/17/97

QC Batch Number: GC1210970HBPEXB
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	10	18
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	303 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

680 Chesapeake Drive Redwood City, CA 94063 (650) 364-9600 FAX (650) 364-9233
404 N. Wiget Lane Walnut Creek, CA 94598 (510) 988-9600 FAX (510) 988-9673
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

50) 364-9600 FAX (650) 364-9233
10) 988-9600 FAX (510) 988-9673
16) 921-9600 FAX (916) 921-0100

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP1 (A-D)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712495-01

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/11/97
Analyzed: 12/11/97
Reported: 12/17/97

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/11/97
Reported: 12/17/97

rgeable Petroleum Hydrocarbons (TPPH) with BTEX

ɔH)

	Detection Limit mg/Kg	Sample Results mg/Kg	Sample Results mg/Kg
	1.0	N.D.	N.D.
	0.0050	N.D.	
	0.0050	N.D.	
	0.0050	N.D.	% Recovery
	0.0050	N.D.	79
.....		..... C6-C12	

Control Limits %		% Recovery
70	130	96
60	140	93

ve the stated limit of detection.

AP #1210

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-5-D6
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712495-02

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/11/97
Analyzed: 12/11/97
Reported: 12/17/97

C Batch Number: GC121197BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93
4-Bromofluorobenzene	60	140	92

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

SEQUOIA ANALYTICAL - ELAP #1210

chard Herling
oject Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-9-D6
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9712495-03

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/12/97
Reported: 12/17/97

C Batch Number: GC121097OHBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	20	620
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	130

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-9-D6
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712495-03

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/11/97
Analyzed: 12/11/97
Reported: 12/17/97

QC Batch Number: GC121197BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**100**	**800**
Benzene	**0.50**	**0.62**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Weathered Gas		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	82
4-Bromofluorobenzene	60	140	Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP3 (A-D)
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9712495-04

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/11/97
Reported: 12/17/97

QC Batch Number: GC1205978010EXA
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
Chlorobenzene	25	N.D.
Chloroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
1,1-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	N.D.
trans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl chloride	50	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	60	130	88
1-Bromofluorobenzene	60	140	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP3 (A-D)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9712495-04

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/11/97
Reported: 12/17/97

QC Batch Number: GC1210970HBPEXB
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	40
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	201 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
4 Digital Drive , Suite 6
ovato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP3 (A-D)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712495-04

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/11/97
Analyzed: 12/17/97
Reported: 12/17/97

C Batch Number: GC121197BTEXEXA
Instrument ID: GCHP1

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
PPH as Gas	10	120
enzene	0.050	0.053
Toluene	0.050	0.77
Ethyl Benzene	0.050	0.88
ylenes (Total)	0.050	5.7
hromatogram Pattern: Gas & Unidentified HC		>C10

Surrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	95
4-Bromofluorobenzene	60	140	8 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP3 (E-H)
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9712495-05

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/12/97
Reported: 12/17/97

QC Batch Number: GC1205978010EXA
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
Chlorobenzene	25	N.D.
Chloroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
1,1-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	N.D.
trans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl chloride	50	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	60	130	86
4-Bromofluorobenzene	60	140	75

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
[redacted]4 Digital Drive , Suite 6
[redacted]Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP3 (E-H)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9712495-05

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/11/97
Reported: 12/17/97

[redacted]C Batch Number: GC1210970HBPEXB
[redacted]nstrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

[redacted]nalyte	Detection Limit mg/Kg	Sample Results mg/Kg
[redacted]EPH as Diesel	1.0	23
[redacted]hromatogram Pattern: Unidentified HC		C9-C24

[redacted]urrogates	Control Limits %		% Recovery
[redacted]-Pentacosane (C25)	50	150	79

[redacted]lytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

[redacted]

[redacted]hard Herling
[redacted]oject Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP3 (E-H)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9712495-05

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/11/97
Analyzed: 12/12/97
Reported: 12/17/97

C Batch Number: GC121197BTEXEXA
strument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	10	150
Benzene	0.050	N.D.
Toluene	0.050	0.32
Ethyl Benzene	0.050	0.38
Xylenes (Total)	0.050	2.8
Chromatogram Pattern:		
Unidentified HC		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	111
4-Bromofluorobenzene	60	140	11 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
[illegible]4 Digital Drive , Suite 6
[illegible]ovato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP2 (A-D)
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9712495-06

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/12/97
Reported: 12/17/97

QC Batch Number: GC1205978010EXA
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
[illegible]romodichloromethane	25	N.D.
[illegible]romoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
[illegible]hlorobenzene	25	N.D.
[illegible]hloroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
[illegible]hloromethane	50	N.D.
[illegible]ibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
[illegible]4-Dichlorobenzene	25	N.D.
[illegible]1-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
[illegible]s-1,2-Dichloroethene	25	N.D.
[illegible]ans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N D.
[illegible]ans-1,3-Dichloropropene	25	N.D.
[illegible]ethylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
[illegible]1,1-Trichloroethane	25	N.D.
[illegible]1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
[illegible]nyl chloride	50	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	60	130	88
[illegible]Bromofluorobenzene	60	140	79

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

SEQUOIA ANALYTICAL - ELAP #1210

[illegible]ichard Herling
[illegible]oject Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 12/05/97
4 Digital Drive , Suite 6	Sample Descript: S-SP2 (A-D)	Received: 12/09/97
ovato, CA 94949	Matrix: SOLID	Extracted: 12/10/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712495-06	Reported: 12/17/97

Batch Number: GC1210970HBPEXB
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
EPH as Diesel	1.0	39
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	264 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 12/05/97
74 Digital Drive , Suite 6	Sample Descript: S-SP2 (A-D)	Received: 12/09/97
Novato, CA 94949	Matrix: SOLID	Extracted: 12/11/97
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712495-06	Reported: 12/17/97

QC Batch Number: GC121197BTEXEXA
Instrument ID: GCHP7

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	5.0	59
Benzene	0.025	0.12
Toluene	0.025	0.75
Ethyl Benzene	0.025	0.98
Xylenes (Total)	0.025	5.5
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90
4-Bromofluorobenzene	60	140	29 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-SP2 (E-H)
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9712495-07

Sampled: 12/05/97
Received: 12/09/97
Extracted: 12/10/97
Analyzed: 12/12/97
Reported: 12/17/97

C Batch Number: GC1205978010EXA
Instrument ID: GCHP09

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
Chlorobenzene	25	N.D.
Chloroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
1,1-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	N.D.
trans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl chloride	50	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	60	130	87
4-Bromofluorobenzene	60	140	77

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 12/05/97
74 Digital Drive , Suite 6	Sample Descript: S-SP2 (E-H)	Received: 12/09/97
Novato, CA 94949	Matrix: SOLID	Extracted: 12/10/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712495-07	Reported: 12/17/97

QC Batch Number: GC1210970HBPEXB
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	10	54
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	230 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 12/05/97
4 Digital Drive , Suite 6	Sample Descript: S-SP2 (E-H)	Received: 12/09/97
lovato, CA 94949	Matrix: SOLID	Extracted: 12/11/97
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712495-07	Reported: 12/17/97

C Batch Number: GC121197BTEXEXA
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	10	180
Benzene	0.050	N.D.
Toluene	0.050	0.078
Ethyl Benzene	0.050	0.32
Xylenes (Total)	0.050	2.0
Chromatogram Pattern:		
Unidentified HC		>C10

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	86
4-Bromofluorobenzene	60	140	26 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9712495 01-07

Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC1205978010EXA	GC1205978010EXA	GC1205978010EXA
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	E. Cunanan	E. Cunanan	E. Cunanan
MS/MSD #:	971217501	971217501	971217501
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	12/5/97	12/5/97	12/5/97
Analyzed Date:	12/8/97	12/8/97	12/8/97
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	50 µg/Kg	50 µg/Kg	50 µg/Kg
Dilution Factor:	1	1	1
Result:	39	41	39
MS % Recovery:	78	82	78
Dup. Result:	43	45	40
MSD % Recov.:	86	90	80
RPD:	9.8	9.3	2.5
RPD Limit:	0-25	0-25	0-25
LCS #:	BLK121097	BLK121097	BLK121097
Prepared Date:	12/10/97	12/10/97	12/10/97
Analyzed Date:	12/11/97	12/11/97	12/11/97
Instrument I.D.#:	GCHP9	GCHP9	GCHP9
Conc. Spiked:	50 µg/Kg	50 µg/Kg	50 µg/Kg
LCS Result:	39	39	38
LCS % Recov.:	78	78	76
MS/MSD Control Limits	60-140	60-140	60-140
LCS Control Limits	65-135	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9712495 01, 04-07

Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME1211976010MDE	ME1211976010MDE	ME1211976010MDE	ME1211976010MDE
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	T. Sears	T. Sears	T. Sears	T. Sears
MS/MSD #:	971254401	971254401	971254401	971254401
Sample Conc.:	N.D.	N.D.	51	38
Prepared Date:	12/11/97	12/11/97	12/11/97	12/11/97
Analyzed Date:	12/11/97	12/11/97	12/11/97	12/11/97
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
Result:	42	44	88	79
MS % Recovery:	84	88	74	82
Dup. Result:	40	43	110	83
MSD % Recov.:	80	86	118	90
RPD:	4.9	2.3	22	4.9
RPD Limit:	0-20	0-20	0-20	0-20
LCS #:	BLK121197	BLK121197	BLK121197	BLK121197
Prepared Date:	12/11/97	12/11/97	12/11/97	12/11/97
Analyzed Date:	12/11/97	12/11/97	12/11/97	12/11/97
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
LCS Result:	45	45	46	48
LCS % Recov.:	90	90	92	96
MS/MSD Control Limits	80-120	80-120	80-120	80-120
LCS Control Limits	80-120	80-120	80-120	80-120

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9712495 01-07

Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1210970HBPEXB
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3550/DHS

Analyst:	G. Fish
MS/MSD #:	971247601
Sample Conc.:	120
Prepared Date:	12/10/97
Analyzed Date:	12/11/97
Instrument I.D.#:	GCHP4B
Conc. Spiked:	25 mg/Kg
Result:	110
MS % Recovery:	-40
Dup. Result:	95
MSD % Recov.:	-100
RPD:	15
RPD Limit:	0-50

LCS #:	BLK121097
Prepared Date:	12/10/97
Analyzed Date:	12/11/97
Instrument I.D.#:	GCHP4B
Conc. Spiked:	25 mg/Kg
LCS Result:	19
LCS % Recov.:	76

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9712495 01-07

Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC121197BTEXEXA	GC121197BTEXEXA	GC121197BTEXEXA	GC121197BTEXEXA	GC121197BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	M. McLachlan	M. McLachlan	M. McLachlan	M. McLachlan	M. McLachlan
MS/MSD #:	971221501	971221501	971221501	971221501	971221501
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/11/97	12/11/97	12/11/97	12/11/97	12/11/97
Analyzed Date:	12/11/97	12/11/97	12/11/97	12/11/97	12/11/97
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg	1.2 mg/Kg
Result:	0 17	0.18	0.18	0.56	1.0
MS % Recovery:	85	90	90	93	83
Dup. Result:	0.18	0.18	0.19	0.56	1.0
MSD % Recov.:	90	90	95	93	83
RPD:	5.7	0.0	5.4	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK121197	BLK121197	BLK121197	BLK121197	BLK121197
Prepared Date:	11/11/97	11/11/97	11/11/97	11/11/97	11/11/97
Analyzed Date:	11/11/97	11/11/97	11/11/97	11/11/97	11/11/97
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg	1.2 mg/Kg
LCS Result:	0.19	0.20	0.20	0.62	1.1
LCS % Recov.:	95	100	100	103	92
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.

P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

971249S

Consultant's Name: Environmental Resolutions, Inc			Page 1 of 3
Address: 74 Digital Drive Suite G Novato CA 94954		Site Location: 6600 E. 14th Street	
Project #:	Consultant Project #: 200912A	Consultant Work Release #: 19432502	
Project Contact: Marc A. Briggs	Phone #: 415-382-5991	Laboratory Work Release #:	
EXXON Contact: Marla D. Goensler	Phone #: 510-246-8768	EXXON RAS #: 7-0236	
Sampled by (print): Marc A. Briggs	Sampler's Signature: Marc A. Briggs		
Shipment Method: Courier	Air Bill #:		

TAT: ☐ 24 hr ☐ 48 hr ☒ 72 hr ☐ 96 hr ☐ Standard (10 day)

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	ANALYSIS REQUIRED: TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	8010	TTLC Pb	Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
S-SP1A	12/5/97		Soil	ICE	1	1	X	X		X	X	
S-SP1B	12/5/97		Soil	ICE	1							Composite
S-SP1C	12/5/97		Soil	ICE	1							
S-SP1D	12/5/97		Soil	ICE	1							
S-5-06	12/5/97		Soil	ICE	1	2	X	X				
S-9-06	12/5/97		Soil	ICE	1	3	X	X				DE 9 12

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Marc A Briggs	12/9/97	1030	[illegible] Sequoia	12/9/97	1030	
[illegible]	12/9/97					
			~S Soil Rec	12/9/97	1211	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 01/26/98
74 Digital Drive , Suite 6	Sample Descript: S-6-B1	Received: 01/27/98
Novato, CA 94949	Matrix: SOLID	Extracted: 01/27/98
	Analysis Method: EPA 8015 Mod	Analyzed: 01/28/98
Attention: Marc Briggs	Lab Number: 9801E42-01	Reported: 01/30/98

QC Batch Number: GC012798OHBPEXB
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	83

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

RECEIVED
FEB 04 1998

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-6-B1
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9801E42-01

Sampled: 01/26/98
Received: 01/27/98
Extracted: 01/27/98
Analyzed: 01/28/98
Reported: 01/30/98

C Batch Number: GC012798BTEXEXC
strument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91
4-Bromofluorobenzene	60	140	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-6-B2
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9801E42-02

Sampled: 01/26/98
Received: 01/27/98
Extracted: 01/27/98
Analyzed: 01/28/98
Reported: 01/30/98

QC Batch Number: GC012798OHBPEXB
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	1.0
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	52

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: S-6-B2
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9801E42-02

Sampled: 01/26/98
Received: 01/27/98
Extracted: 01/27/98
Analyzed: 01/28/98
Reported: 01/30/98

QC Batch Number: GC012798BTEXEXC
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94
4-Bromofluorobenzene	60	140	109

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921 9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid

Work Order #: 9801E42 01, 02

Reported: Feb 2, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0127980HBPEXB
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3550/DHS

Analyst:	D. Lockhart
MS/MSD #:	9801C2913
Sample Conc.:	5.9
Prepared Date:	1/27/98
Analyzed Date:	1/28/98
Instrument I.D.#:	GCHP19B
Conc. Spiked:	25 mg/Kg
Result:	29
MS % Recovery:	92
Dup. Result:	22
MSD % Recov.:	64
RPD:	28
RPD Limit:	0-50

LCS #:	BLK012798
Prepared Date:	1/27/98
Analyzed Date:	1/28/98
Instrument I.D.#:	GCHP19B
Conc. Spiked:	25 mg/Kg
LCS Result:	23
LCS % Recov.:	92

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9801E42 01, 02

Reported: Feb 2, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC012798BTEXEXC	GC012798BTEXEXC	GC012798BTEXEXC	GC012798BTEXEXC	GC012798BTEXEXC
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J Minkel	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9801D8201	9801D8201	9801D8201	9801D8201	9801D8201
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	1/27/98	1/27/98	1/27/98	1/27/98	1/27/98
Analyzed Date:	1/28/98	1/28/98	1/28/98	1/28/98	1/28/98
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0 20 mg/Kg	0.60 mg/Kg	1.2 mg/Kg
Result:	0.18	0.18	0.19	0.59	1.1
MS % Recovery:	90	90	95	98	92
Dup. Result:	0.19	0.19	0.20	0.59	1.2
MSD % Recov.:	95	85	100	98	100
RPD:	5 4	5.4	5.1	0.0	8.7
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK012798	BLK012798	BLK012798	BLK012798	BLK012798
Prepared Date:	1/27/98	1/27/98	1/27/98	1/27/98	1/27/98
Analyzed Date:	1/28/98	1/28/98	1/28/98	1/28/98	1/28/98
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0 20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg	1.2 mg/Kg
LCS Result:	0.19	0 19	0 20	0.59	1.2
LCS % Recov.:	95	95	100	98	100
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.

P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

Consultant's Name: Environmental Resolutions Inc			**Page** 1 **of** 1
Address: 74 Digital Dr #6, Novato Ca 94949			**Site Location:** 663° E 14th St, Oakland
Project #:	**Consultant Project #:** 200912X		**Consultant Work Release #:** 19432502
Project Contact: Marc Briggs	**Phone #:** 415 382-9105		**Laboratory Work Release #:**
EXXON Contact: Marla Guensler	**Phone #:** 510 246-8776		**EXXON RAS #:** 7-0236
Sampled by (print): Chappell / Blank	**Sampler's Signature:**		
Shipment Method: Courier	**Air Bill #:**		

TAT: ☒ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☐ Standard (10 day)

ANALYSIS REQUIRED 9801E42

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
S-6-B1	1/26/98	10:30	Soil	NA	1	1	X	X				
S-6-B2	1/26/98	11:15	Soil	NA	1	2	X	X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Eva Shallenberger	1/27/98	12:18	José Reed	1/27/98	12:18	
José Reed	1/27/98	3:18				
				1/27/98	15:18	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X

Lab Proj. ID: 9712495

Received: 12/09/97

Reported: 12/17/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 28 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
7 Digital Drive , Suite 6
N vato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: SP-2-1
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9804347-01

Sampled: 04/02/98
Received: 04/06/98
Extracted: 04/09/98
Analyzed: 04/13/98
Reported: 04/14/98

)C Batch Number: GC0407988010EXA
ıstrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
Chlorobenzene	25	N.D.
Chloroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
1,1-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	N.D.
trans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl chloride	50	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	60	130	111
4-Bromofluorobenzene	60	140	101

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

EQUOIA ANALYTICAL - ELAP #1210

For

c rd Herling
'o ct Manager

RECEIVED
APR 28 1998

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
[redacted] Digital Drive , Suite 6
[redacted]ovato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: SP-2-1
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9804347-01

Sampled: 04/02/98
Received: 04/06/98
Extracted: 04/09/98
Analyzed: 04/10/98
Reported: 04/14/98

[redacted] Batch Number: GC0409980HBPEXC
[redacted]rument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
[redacted]PH as Diesel	10	23
[redacted]romatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
[redacted]entacosane (C25)	50	150	251 Q

[redacted]es reported as N.D. were not present above the stated limit of detection.

[redacted]EQUOIA ANALYTICAL - ELAP #1210

[redacted] For

[redacted]ard Herling
[redacted]ct Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
Digital Drive , Suite 6
ovato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: SP-2-1
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9804347-01

Sampled: 04/02/98
Received: 04/06/98
Extracted: 04/08/98
Analyzed: 04/08/98
Reported: 04/14/98

Batch Number: GC040898BTEXEXB
strument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

nalyte	Detection Limit mg/Kg	Sample Results mg/Kg
PPH as Gas	1.0	7.2
enzene	0.0050	0.0094
Toluene	0.0050	0.0062
thyl Benzene	0.0050	0.011
ylenes (Total)	0.0050	0.048
hromatogram Pattern:		
Weathered Gas		C6-C12

urrogates	Control Limits %		% Recovery
fluorotoluene	70	130	100
4-Bromofluorobenzene	60	140	109

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

SEQUOIA ANALYTICAL - ELAP #1210

For

ard Herling
ect Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
Digital Drive , Suite 6
vato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: SP-2-2
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9804347-02

Sampled: 04/02/98
Received: 04/06/98
Extracted: 04/09/98
Analyzed: 04/13/98
Reported: 04/14/98

Batch Number: GC0407988010EXA
rument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
omodichloromethane	25	N.D.
omoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
lorobenzene	25	N.D.
loroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
loromethane	50	N.D.
bromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
-Dichlorobenzene	25	N.D.
-Dichloroethane	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
-1,2-Dichloroethene	25	N.D.
ns-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
ns-1,3-Dichloropropene	25	N.D.
thylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
,1-Trichloroethane	25	N.D.
,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
yl chloride	50	N.D.

Surrogates	Control Limits %		% Recovery
hloro-2-fluorobenzene	60	130	89
romofluorobenzene	60	140	90

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

SEQUOIA ANALYTICAL - ELAP #1210

For

ard Herling
ect Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
7[illegible] Digital Drive , Suite 6
N[illegible]vato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: SP-2-2
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9804347-02

Sampled: 04/02/98
Received: 04/06/98
Extracted: 04/09/98
Analyzed: 04/10/98
Reported: 04/14/98

QC Batch Number: GC0409980HBPEXC
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	10	44
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	417 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

For

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 04/02/98
74 Digital Drive , Suite 6	Sample Descript: SP-2-2	Received: 04/06/98
Novato, CA 94949	Matrix: SOLID	Extracted: 04/08/98
	Analysis Method: 8015Mod/8020	Analyzed: 04/08/98
Attention: Marc Briggs	Lab Number: 9804347-02	Reported: 04/14/98

QC Batch Number: GC040898BTEXEXB
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**8.2**
Benzene	0.0050	N.D.
Toluene	**0.0050**	**0.0054**
Ethyl Benzene	**0.0050**	**0.011**
Xylenes (Total)	**0.0050**	**0.054**
Chromatogram Pattern:		
Weathered Gas		C6-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94
4-Bromofluorobenzene	60	140	116

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

SEQUOIA ANALYTICAL - ELAP #1210

For

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 04/02/98
74 Digital Drive , Suite 6	Sample Descript: SP-2-3	Received: 04/06/98
[illegible]vato, CA 94949	Matrix: SOLID	Extracted: 04/09/98
	Analysis Method: EPA 8010	Analyzed: 04/13/98
Attention: Marc Briggs	Lab Number: 9804347-03	Reported: 04/14/98

QC Batch Number: GC0407988010EXA
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	50	N.D.
Bromoform	50	N.D.
Bromomethane	100	N.D.
Carbon Tetrachloride	50	N.D.
Chlorobenzene	50	N.D.
Chloroethane	100	N.D.
2-Chloroethylvinyl ether	100	N.D.
Chloroform	50	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	50	N.D.
1,2-Dichlorobenzene	50	N.D.
1,3-Dichlorobenzene	50	N.D.
1,4-Dichlorobenzene	50	N.D.
1,1-Dichloroethane	50	N.D.
1,2-Dichloroethane	50	N.D.
1,1-Dichloroethene	50	N.D.
cis-1,2-Dichloroethene	50	N.D.
trans-1,2-Dichloroethene	50	N.D.
1,2-Dichloropropane	50	N.D.
cis-1,3-Dichloropropene	50	N.D.
trans-1,3-Dichloropropene	50	N.D.
Methylene chloride	500	N.D.
1,1,2,2-Tetrachloroethane	50	N.D.
Tetrachloroethene	50	N.D.
1,1,1-Trichloroethane	50	N.D.
1,1,2-Trichloroethane	50	N.D.
Trichloroethene	50	N.D.
Trichlorofluoromethane	50	N.D.
Vinyl chloride	100	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	60	130	97
4-Bromofluorobenzene	60	140	86

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

SEQUOIA ANALYTICAL - ELAP #1210

For

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X

Lab Proj. ID: 9801E42

Received: 01/27/98

Reported: 01/30/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 5 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.
P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

9712495

Page 2 of 3

Consultant's Name: Environmental Resolutions, Inc.		
Address: 74 Digital Drive Suite G Novato CA		Site Location: 6600 E. 14th Street
Project #:	Consultant Project #: 200912x	Consultant Work Release #: 19432502
Project Contact: Marc A. Briggs	Phone #: 415-382-5991	Laboratory Work Release #:
EXXON Contact: Marla D. Goensler	Phone #: 510-246-8768	EXXON RAS #: 7-0236
Sampled by (print): Marc A Briggs	Sampler's Signature: Marc A. Briggs	
Shipment Method: courier	Air Bill #:	

TAT: ☐ 24 hr ☐ 48 hr ☒ 72 hr ☐ 96 hr ☐ Standard (10 day)

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	ANALYSIS REQUIRED: TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	8010	TTLC Pb	Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
S-SP3A	12/5/97		Soil	ICE	1	4	X	X		X	X	
S-SP3B	12/5/97		Soil	ICE	1							
S-SP3C	12/5/97		Soil	ICE	1							Composite
S-SP3D	12/5/97		Soil	ICE	1							
S-SP3E	12/5/97		Soil	ICE	1	5	X	X		X	X	
S-SP3F	12/5/97		Soil	ICE	1							
S-SP3G	12/5/97		Soil	ICE	1							
S-SP3H	12/5/97		Soil	ICE	1							DE 9 12

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Marc A. Briggs / ERI	12/9/97	1030	D... / SEQ	12/9/97	1030	
D...	12/9/97					
			-5 / Sequoia	12/9/97	1911	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.
P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

97124 95

Consultant's Name: ENVIRONMENTAL RESOLUTIONS, INC. Page 3 of 3

Address: 71 DIGITAL DRIVE, SUITE G NOVATO CA Site Location: 6600 E. 14TH STREET

Project #: Consultant Project #: 200912x Consultant Work Release #: 19432502

Project Contact: MARC A. BRIGGS Phone #: 415-382-5991 Laboratory Work Release #:

EXXON Contact: MARLA D. GUENSLER Phone #: 510-246-8768 EXXON RAS #: 70236

Sampled by (print): MARC A. BRIGGS Sampler's Signature: Marc A. Briggs

Shipment Method: COURIER Air Bill #:

TAT: ☐ 24 hr ☐ 48 hr ☒ 72 hr ☐ 96 hr ☐ Standard (10 day)

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	8010	TTLC Pb	Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
S-SP2A	12/5/97		SOIL	ICE	1	C	X	X		X	X	
S-SP2B	12/5/97		SOIL	ICE	1							COMPOSITE
S-SP2C	12/5/97		SOIL	ICE	1							
S-SP2D	12/5/97		SOIL	ICE	1							
S-SP2E	12/5/97		SOIL	ICE	1	7	X	X		X	X	
S-SP2F	12/5/97		SOIL	ICE	1							COMPOSITE
S-SP2G	12/5/97		SOIL	ICE	1							
S-SP2H	12/5/97		SOIL	ICE	1							

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Marc A. Briggs / ERI	12/9/97	1030	/ SEQ	12/9/97	1030	
	12/9/97					
			~S / Shipping	N/A	1211	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 04/02/98
74 Digital Drive , Suite 6	Sample Descript: SP-2-3	Received: 04/06/98
ovato, CA 94949	Matrix: SOLID	Extracted: 04/09/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/10/98
Attention: Marc Briggs	Lab Number: 9804347-03	Reported: 04/14/98

Batch Number: GC0409980HBPEXC
rument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	10	110
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	124

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

SEQUOIA ANALYTICAL - ELAP #1210

For

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: SP-2-3
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9804347-03

Sampled: 04/02/98
Received: 04/06/98
Extracted: 04/08/98
Analyzed: 04/09/98
Reported: 04/14/98

QC Batch Number: GC040898BTEXEXB
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	50	370
Benzene	0.25	0.86
Toluene	0.25	0.47
Ethyl Benzene	0.25	1.5
Xylenes (Total)	0.25	1.5
Chromatogram Pattern:		
Gas & Unidentified HC		+>C10

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	126
4-Bromofluorobenzene	60	140	Q

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

SEQUOIA ANALYTICAL - ELAP #1210

For

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Sample Descript: SP-2-4
Matrix: SOLID
Analysis Method: EPA 8010
Lab Number: 9804347-04

Sampled: 04/02/98
Received: 04/06/98
Extracted: 04/09/98
Analyzed: 04/13/98
Reported: 04/14/98

QC Batch Number: GC0407988010EXA
Instrument ID: GCHP08

Halogenated Volatile Organics (EPA 8010)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Bromodichloromethane	25	N.D.
Bromoform	25	N.D.
Bromomethane	50	N.D.
Carbon Tetrachloride	25	N.D.
Chlorobenzene	25	N.D.
Chloroethane	50	N.D.
2-Chloroethylvinyl ether	50	N.D.
Chloroform	25	N.D.
Chloromethane	50	N.D.
Dibromochloromethane	25	N.D.
1,2-Dichlorobenzene	25	N.D.
1,3-Dichlorobenzene	25	N.D.
1,4-Dichlorobenzene	25	N.D.
1,2-Dichloroethane	25	N.D.
1,1-Dichloroethane	25	N.D.
1,1-Dichloroethene	25	N.D.
cis-1,2-Dichloroethene	25	N.D.
trans-1,2-Dichloroethene	25	N.D.
1,2-Dichloropropane	25	N.D.
cis-1,3-Dichloropropene	25	N.D.
trans-1,3-Dichloropropene	25	N.D.
Methylene chloride	250	N.D.
1,1,2,2-Tetrachloroethane	25	N.D.
Tetrachloroethene	25	N.D.
1,1,1-Trichloroethane	25	N.D.
1,1,2-Trichloroethane	25	N.D.
Trichloroethene	25	N.D.
Trichlorofluoromethane	25	N.D.
Vinyl chloride	50	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	60	130	91
4-Bromofluorobenzene	60	140	82

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

SEQUOIA ANALYTICAL - ELAP #1210

For

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 04/02/98
74 Digital Drive , Suite 6	Sample Descript: SP-2-4	Received: 04/06/98
Novato, CA 94949	Matrix: SOLID	Extracted: 04/09/98
	Analysis Method: EPA 8015 Mod	Analyzed: 04/10/98
Attention: Marc Briggs	Lab Number: 9804347-04	Reported: 04/14/98

QC Batch Number: GC0409980HBPEXC
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	10	41
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	427 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

For

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions	Client Proj. ID: Exxon 7-0236, 200912X	Sampled: 04/02/98
74 Digital Drive , Suite 6	Sample Descript: SP-2-4	Received: 04/06/98
Novato, CA 94949	Matrix: SOLID	Extracted: 04/08/98
	Analysis Method: 8015Mod/8020	Analyzed: 04/09/98
Attention: Marc Briggs	Lab Number: 9804347-04	Reported: 04/14/98

QC Batch Number: GC040898BTEXEXB
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	103
4-Bromofluorobenzene	60	140	106

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9804347 01, 02, 03, 04
Reported: Apr 22, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC0407988010EXA	GC0407988010EXA	GC0407988010EXA
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	L. Kim	L. Kim	L. Kim
MS/MSD #:	980427601	980427601	980427601
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	4/7/98	4/7/98	4/7/98
Analyzed Date:	4/8/98	4/8/98	4/8/98
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	50 µg/Kg	50 µg/Kg	50 µg/Kg
Result:	38	44	47
MS % Recovery:	76	88	94
Dup. Result:	38	48	48
MSD % Recov.:	76	96	96
RPD:	0.0	8.7	2.1
RPD Limit:	0-25	0-25	0-25
LCS #:	LCS040998	LCS040998	LCS040998
Prepared Date:	4/9/98	4/9/98	4/9/98
Analyzed Date:	4/9/98	4/9/98	4/9/98
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	50 µg/Kg	50 µg/Kg	50 µg/Kg
LCS Result:	43	49	50
LCS % Recov.:	86	98	100
MS/MSD	60-140	60-140	60-140
LCS	65-135	70-130	70-130
Control Limits			

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9804347 01, 02, 03, 04

Reported: Apr 22, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0409980HBPEXC
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3550/DHS
Analyst:	A. Porter
MS/MSD #:	980424101
Sample Conc.:	80
Prepared Date:	4/9/98
Analyzed Date:	4/10/98
Instrument I.D.#:	GCHP5A
Conc. Spiked:	16.7 mg/Kg
Result:	150
MS % Recovery:	419
Dup. Result:	160
MSD % Recov.:	479
RPD:	6.5
RPD Limit:	0-50

LCS #:	BLK040998
Prepared Date:	4/9/98
Analyzed Date:	4/10/98
Instrument I.D.#:	GCHP5A
Conc. Spiked:	16.7 mg/Kg
LCS Result:	15
LCS % Recov.:	90

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9804347 01, 02, 03, 04

Reported: Apr 22, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC040898BTEXEXB	GC040898BTEXEXB	GC040898BTEXEXB	GC040898BTEXEXB	GC040898BTEXEXB
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	98041809	98041809	98041809	98041809	98041809
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/8/98	4/8/98	4/8/98	4/8/98	4/8/98
Analyzed Date:	4/8/98	4/8/98	4/8/98	4/8/98	4/8/98
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg	1.2 mg/Kg
Result:	0.17	0 18	0.18	0.52	1.1
MS % Recovery:	85	90	90	87	92
Dup. Result:	0.22	0.22	0.22	0.66	1.4
MSD % Recov.:	110	110	110	110	117
RPD:	26	20	20	24	24
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK040898	BLK040898	BLK040898	BLK040898	BLK040898
Prepared Date:	4/8/98	4/8/98	4/8/98	4/8/98	4/8/98
Analyzed Date:	4/8/98	4/8/98	4/8/98	4/8/98	4/8/98
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg	1.2 mg/Kg
LCS Result:	0.22	0 22	0.22	0.65	1.3
LCS % Recov.:	110	110	110	108	108
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

[redacted]80 C[redacted]eake[redacted]
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY U.S.A.

P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

Consultant's Name: ENVIRONMENTAL RESOLUTIONS, INC.			Page 1 of 1
Address:		Site Location: 6630 E/14th St.	
Project #: 7-0236	Consultant Project #: 200912X	Consultant Work Release #: 9432502	
Project Contact: MARC BRIGGS	Phone #: (415) 382-9105	Laboratory Work Release #:	
EXXON Contact: MARLA GUENSLER	Phone #: (510) 246-8776	EXXON RAS #: 7-0236	
Sampled by (print): MATT CARPENTER	Sampler's Signature:	Oakland, CA.	
Shipment Method:	Air Bill #:		

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☒ Standard (10 day)

ANALYSIS REQUIRED 9804347

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	8010		Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
SP-2-1	4/2/98	3:30	SOIL	ICE	1	1	X	X		X		~~SP-2-1~~ TB
SP-2-2					1	2	X	X		X		
SP-2-3					1	3	X	X		X		
SP-2-4					1	4	X	X		X		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
[signature]	4-6-98	11:02	[signature] Sequoia	4-6-98	11:02	
[signature] Sequoia	4-6-98					
			[signature] Sequoia	4/6/98	1311	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X
Lab Proj. ID: 9804347

Received: 04/06/98
Reported: 04/14/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 17 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

For

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

RECEIVED
MAY 04 1998

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Client Proj. ID: Exxon 7-0236, 200912X

Lab Proj. ID: 9804F20

Sampled: 04/02/98
Received: 04/06/98
Analyzed: see below

Attention: Marc Briggs

Reported: 04/30/98

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9804F20-01 Sample Desc : SOLID,SP-2-1				
Lead by ICP	mg/Kg	04/28/98	5.0	16
Lab No: 9804F20-02 Sample Desc : SOLID,SP-2-2				
Lead by ICP	mg/Kg	04/28/98	5.0	54
Lab No: 9804F20-03 Sample Desc : SOLID,SP-2-3				
Lead by ICP	mg/Kg	04/28/98	5.0	6.9
Lab No: 9804F20-04 Sample Desc : SOLID,SP-2-4				
Lead by ICP	mg/Kg	04/28/98	5.0	12

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-0236, 200912X
Matrix: Solid
Work Order #: 9804F20 01-04
Reported: May 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0428986010MDF	ME0428986010MDF	ME0428986010MDF	ME0428986010MDF
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	T. Sears	T. Sears	T. Sears	T. Sears
MS/MSD #:	9804G5101	9804G5101	9804G5101	9804G5101
Sample Conc.:	N.D.	N.D.	12	6.2
Prepared Date:	4/28/98	4/28/98	4/28/98	4/28/98
Analyzed Date:	4/18/98	4/18/98	4/18/98	4/18/98
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
Result:	44	46	60	51
MS % Recovery:	88	92	96	92
Dup. Result:	44	46	56	49
MSD % Recov.:	88	92	88	88
RPD:	0.0	0.0	6.9	4.0
RPD Limit:	0-20	0-20	0-20	0-20
LCS #:	BLK042898	BLK042898	BLK042898	BLK042898
Prepared Date:	4/28/98	4/28/98	4/28/98	4/28/98
Analyzed Date:	4/18/98	4/18/98	4/18/98	4/18/98
Instrument I.D.#:	MTJA5	MTJA5	MTJA5	MTJA5
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
LCS Result:	46	47	47	47
LCS % Recov.:	92	94	94	94
MS/MSD Control Limits	80-120	80-120	80-120	80-120
LCS Control Limits	80-120	80-120	80-120	80-120

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

[redacted]ola / [redacted]cal
680 Chesapeake Dr.
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.

P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: ENVIRONMENTAL RESOLUTIONS, INC.

Address:

Project #: 7-0236

Project Contact: MARC BRIGGS

EXXON Contact: MARLA GUENSLER

Sampled by (print): MATT CARPENTER

Shipment Method:

Consultant Project #: 200912X

Phone #: (415) 382-9105

Phone #: (510) 246-8776

Sampler's Signature:

Air Bill #:

Site Location: 6630 E/14th St.

Consultant Work Release #: 19432502

Laboratory Work Release #:

EXXON RAS #: 7-0236

Oakland, CA.

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☒ Standard (10 day)

ANALYSIS REQUIRED 9104347

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	8010		Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
SP-2-1	4/2/98	3:30	SOIL	ICE	1	1	X	X		X		~~SP-1-A~~
SP-2-2					1	2	X	X		X		
SP-2-3					1	3	X	X		X		
SP-2-4					1	4	X	X		X		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
[signature] / Sequoia	4-6-98	11:02	[signature] / Sequoia	4-6-98	11:00	
[signature] / Sequoia	4-6-98		[signature] / Sequoia	4/6/98	1311	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-0236, 200912X

Lab Proj. ID: 9804F20

Received: 04/06/98

Reported: 04/30/98

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 4 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

ATTACHMENT G

Soil Disposal Documentation

Dillard Trucking, Inc. d.b.a.
DILLARD ENVIRONMENTAL SERVICES
P.O. Box 579
Byron, CA 94514
Telephone No. (510) 634-6850 ◆ Facsimile No. (510) 634-0569

February 3, 1998

Environmental Resolutions

Attn: **Marc Briggs**

RE: **Exxon #7-0236: 6600 East 14th Street, Oakland, CA**
Removed: 197.23 tons

Dear Mr. Briggs:

Please be advised that the stockpile from the above referenced site has been removed. The soil was transported for disposal to BFI/ Vasco in Livermore, CA on January 30, 1998.

Should you have any questions, please do not hesitate to call.

Sincerely,

Dillard Trucking, Inc. dba,
DILLARD ENVIRONMENTAL SERVICES

Regan Cortez
Customer Service Representative

cc: file

Dillard Trucking, Inc. d.b.a.
DILLARD ENVIRONMENTAL SERVICES
P.O. Box 579
Byron, CA 94514
Telephone No. (925) 634-6850 ◆ Facsimile No. (925) 634-0569

July 27, 1998

Environmental Resolutions, Inc.

Attn: Mark Dockum

RE: **Exxon Station #7-0236 - 6600 E. 14th Street, Oakland, CA**
Removed: 150.55 tons bulk soil

Dear Mr. Dockum:

Please be advised that the stockpile from the above referenced site has been removed. The soil was transported for disposal to BFI\ Vasco in Livermore, CA on July 23, 1998.

Should you have any questions, please do not hesitate to call.

Sincerely,

Dillard Trucking, Inc. dba,
DILLARD ENVIRONMENTAL SERVICES

Regan Cortez
Customer Service Representative

Enclosures- Manifest # 294813, 294815, 294816, 294817, 294818, 294819, 294820