

EXXON COMPANY, U.S.A.

P. O. BOX 4032, CONCORD, CA 94524-4032

MARKETING DEPARTMENT
STORE DEVELOPMENT

BRAD ANDERSON
PROJECT ENGINEER

all
295

September 5, 1997

BARNEY CHAN
ALAMEDA COUNTY DEPT. OF ENVIRONMENTAL HEALTH
1131 HARBOR BAY PARKWAY 2ND FLOOR
ALAMEDA, CA 94502

Re: Exxon RAS #7-0238
2200 East 12th St.
Oakland, CA 94606

Dear Mr. Chan:

Attached is a copy of an Environmental Report detailing the results of soil sampling protocol completed during a waste oil tank removal for the above referenced site. If you have any questions, please contact me at (510) 246-8724.

Sincerely,



Brad Anderson
Exxon Project Engineer

Attachment: EA report dated November 13, 1997

c: Project file Store #7-0238
c w/attachment: Marla Guensler

97 DEC 15 PM 8:59
PROJECT ENGINEER





13 November 1997

Leslie Thomas
Exxon Company, U.S.A.
P.O. Box 4032
2300 Clayton Road, Suite 1250
Concord, California 94524-4032

RE: Analytical results for used-oil UST confirmation soil samples collected at Exxon RS 7-0238,
2200 East 12th Street, Oakland, California

Dear Ms. Thomas:

At the request of Exxon Company, U.S.A. (Exxon), EA Engineering, Science, and Technology (EA) performed soil sampling after the removal of the used-oil underground storage tank (UST) at the above-referenced site.

On 17 September 1997, a geologist from EA met with Mr. Heman Gomez of the City of Oakland Fire Services Agency (COFSA) and Mr. Barney Chan of the Alameda County Department of Environmental Health (ACDEH) to witness the removal of the 550-gallon single-walled fiberglass used-oil UST located on the east side of the station building. The UST was removed by Henderson Construction (Henderson) of Stockton, California. Prior to removal of the UST, dry ice was placed in the tank to displace oxygen and petroleum hydrocarbon vapors, in order to eliminate explosion hazards. Mr. Chan and Mr. Gomez were present to witness the removal of the UST, to inspect the UST, and to approve the soil sample location. After the UST was removed from the excavation, the exterior of the tank was scraped clean and inspected by EA, ACDEH personnel, and COFSA personnel for holes and evidence of leaks and damage. No holes, cracks, or leaks were observed in the tank. However, the sides of the UST were stained, possibly due to overfilling of the UST. The UST was transported by Erickson Environmental Incorporated and recycled at their facility in Richmond, California. A photolog documenting the removal of the UST is provided in Attachment A. A copy of the disposal manifest is included in Attachment B.

One soil sample, WO-10', was collected from native soil beneath the UST at a depth of approximately 10 feet below ground surface. The location of the soil sample is indicated in Figure 1. EA directed the Henderson backhoe operator to remove approximately 1 to 2 feet of native soil at the specified location, using the backhoe bucket. The soil sample was collected from the backhoe bucket by compacting native soil into a 2-inch-by-6-inch factory-cleaned brass sleeve. The sleeve was sealed with teflon, capped, labeled, and placed in an ice-packed cooler for transport to an EPA-certified laboratory. Although the soil sample was saturated with water, a water sample was not collected from the base of the excavation due to insufficient water in the tank cavity.

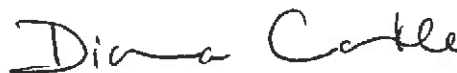
The soil sample was submitted under chain of custody to Sequoia Analytical laboratory (Sequoia) of Redwood City, California, and analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-g) and as diesel (TPH-d) by Cal EPA-modified Method 8015; for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8020; for Total Recoverable Petroleum Hydrocarbons (TRPH) by Standard Method 5520 E&F; for Volatile Organic Compounds (VOCs) by EPA Method 8240; for Semivolatile Organics (SVOCs) by EPA Method 8270; and for cadmium, chromium, lead, nickel, and zinc.

VOCs and SVOCs were not detected in the sample (WO-10') at concentrations equal to or greater than the laboratory method detection limits. TPH-g, TPH-d and TRPH were detected in the sample at concentrations of 11 mg/kg and 440 mg/kg, and 200 mg/kg, respectively. BTEX compounds were detected at concentrations of 0.024 (benzene), 0.011 (toluene), 0.064 (ethylbenzene), and 0.11 (xylenes). The metals detected in the sample were chromium (18 mg/kg), lead (27 mg/kg), nickel (24 mg/kg), and zinc (35 mg/kg). The laboratory analytical reports are included in Attachment C.

Approximately 15 cubic yards of pea gravel were generated during the removal of the used-oil UST. After approval by Mr. Chan, the UST cavity was backfilled with the excavated pea gravel and additional clean fill was used to restore the excavation to the original grade. Four samples (WOSPA-WOSPD) were collected from the pea gravel generated during removal of the used-oil UST and submitted to Sequoia. The samples were composited into one sample in the laboratory and the sample was analyzed for TPH-g, TPH-d, TRPH, BTEX, VOCs, SVOCs, and Title 26 metals. Mr. Chan was notified by EA upon receipt of the laboratory results. Based on the petroleum hydrocarbon concentrations detected in both the native soil sample collected from beneath the UST and the samples collected from the pea gravel fill material, Mr. Chan approved no further investigation of the soil in the vicinity of the used-oil UST cavity. However, Mr. Chan requested that the groundwater monitoring wells at the site be sampled for total oil and grease (TOG) during the next quarterly sampling event.

If you have any questions or comments, please contact our office at (510) 283-7077.

Sincerely,



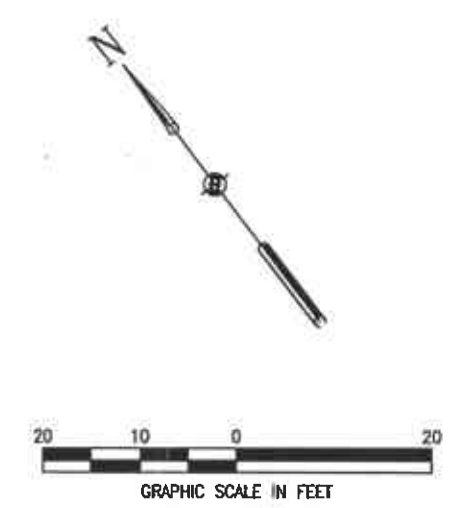
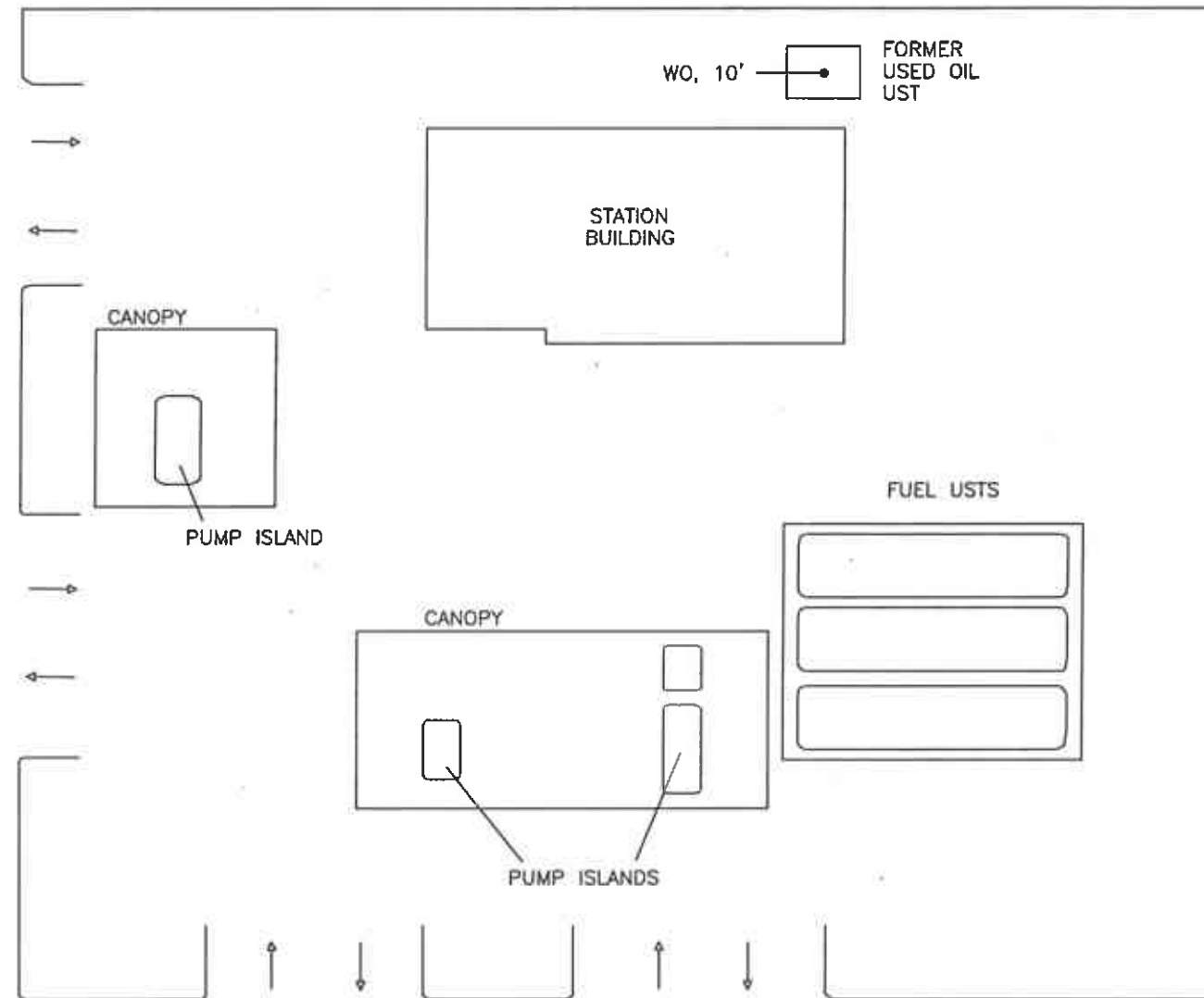
Diana Conkle
Staff Geologist



Christa G. Marting
Project Manager

DLC/kmb
enclosures

cc: Mr. Barney Chan, ACDEH
Mr. Hernan Gomez, COFSA
Ms. Marla Guensler, Exxon



FILE: F:\PROJECTS\7-0238\MASTER\GRAPHICS\FIGSITE.DWG

Figure 1. Site plan showing station features and location of used oil tank confirmation sample, Exxon RS 7-0238, 2200 E. 12th Street, Oakland, CA.

Attachment A

Photolog

Exxon RS 7-0238
Address: 2200 E. 12th Street
City: Oakland, CA

Photo Number: 1
Date Taken: 9/17/97
Weather: Sunny
Photographer: D. Conkle

Photograph Description:
Used oil UST still intact.



Exxon RS 7-0238
Address: 2200 E. 12th Street
City: Oakland, CA

Photo Number: 2
Date Taken: 9/17/97
Weather: Sunny
Photographer: D. Conkle

Photograph Description:
Southern side of used oil UST.



Exxon RS 7-0238
Address: 2200 E. 12th Street
City: Oakland, CA

Photo Number: 3
Date Taken: 9/17/97
Weather: Sunny
Photographer: D. Conkle

Photograph Description:
Northern side of used oil UST.



Exxon RS 7-0238
Address: 2200 E. 12th Street
City: Oakland, CA

Photo Number: 4
Date Taken: 9/17/97
Weather: Sunny
Photographer: D. Conkle

Photograph Description:
Used oil UST cavity.



Attachment B
Disposal Manifests

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. Manifest Document No. 2. Page 1 Information in the shaded areas is not required by Federal law.
 CA D 0 3 3 2 + 4 2 6 3 6 7 0 2 3 1 3 1 of 1

3. Generator's Name and Mailing Address
 EXXON COMPANY U.S.A.
 PO Box 415
 Houston, TX 77210
 4. Generator's Phone (713) 252-7739
 A. State Manifest Document Number 96415745
 B. State Generator's ID 4Y49316-10193781

5. Transporter 1 Company Name 6. US EPA ID Number
 F... 14037777-14037777
 C. State Transporter's ID
 D. Transporter's Phone (510) 235-1393

7. Transporter 2 Company Name 8. US EPA ID Number
 E. State Transporter's ID
 F. Transporter's Phone

9. Designated Facility Name and Site Address 10. US EPA ID Number
 285 Dale Blvd.
 Richmond, CA 94801
 G. State Facility's ID
 H. Facility's Phone (510) 235-1393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers		13. Total Quantity	14. Unit Wt/Vol	15. Waste Number
	No.	Type			
a. UN 1993 Hazardous Waste Solid Waste Empty Storage Tank Gasol. Prod. Residue T.E. 1015/50 E					State 512 EPA/Other EXNE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
 One (1) Empty Storage Tank(s) # 970971
 Tank(s) have been inerted with 15
 lbs. Dry Ice Per 1000 Gallon Capacity
 Gaseous Prop. t.
 K. Handling Codes for Wastes Listed Above
 a. b. c. d.

15. Special Handling Instructions and Additional Information
 Keep away from sources of ignition. Always wear haz. suits when working around.
 U.S.G.T.'s 24 Hr. Contact Name: EXXON, Phone: 1-800-443-5739
 P.O. address

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
 If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name Signature Month Day Year
 [Signature] [Signature] 01 09 11 7 77

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name Signature Month Day Year
 [Signature] [Signature] 01 09 11 7 77

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name Signature Month Day Year
 [Signature] [Signature]

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
 Printed/Typed Name Signature Month Day Year

DO NOT WRITE BELOW THIS LINE.

GENERATOR
 EMERGENCY
 CALL 1-800-424-8802 WITHIN CALIFORNIA; CALL 1-800-852-7350

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <i>AAAD00019844191257</i>	Manifest Document No. <i>191257</i>	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address <i>EXXON CO USA 10 FOX GARDEN RD 2750 HUNTON TX 77258</i>			A. State Manifest Document Number <i>93019857</i>		
4. Generator's Phone <i>713 656-2927</i>			B. State Generator's ID <i>AAAD036019879</i>		
5. Transporter 1 Company Name <i>UNION FREIGHT</i>		6. US EPA ID Number <i>AAAD0204050</i>		C. State Transporter's ID <i>50 63 0336</i>	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone <i>50 63 0336</i>	
9. Designated Facility Name and Site Address <i>CROSBY & SWERTON 1650 W 17TH ST LONG BEACH CA 90802</i>			10. US EPA ID Number <i>AAAD0204050</i>		E. State Facility's ID
			11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		F. Facility's Phone <i>562 492 5445</i>
a. <i>NON-FLAMMABLE HAZARDOUS WASTE</i>			12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol
b. <i>LIQUID WASTE (OIL/WATER)</i>			c. <i>20 20 400 50 5</i>		
c.					
d.					
17. Additional Descriptions for Materials Listed Above <i>12 WASTE OIL TANK RINSATE AFO APPEAL 5333</i>			K. Handling Codes for Wastes Listed Above		
15. Special Handling Instructions and Additional Information <i>WEAR PROPER PROTECTIVE GEAR 1-510-635-0336 24 HRS EWR 19712574</i>			<i>STATION 70238 2860 E 12TH ST GARDLAND CA 94601 RING 15616 THOMAS</i>		
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.					
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name <i>Leanne Thomas</i>		Signature <i>[Signature]</i>		Month Day Year <i>09 17 97</i>	
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name <i>Scott F. ...</i>		Signature <i>[Signature]</i>	
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		Printed/Typed Name		Signature	
				Month Day Year	

DO NOT WRITE BELOW THIS LINE.

GENERATOR
 TRANSPORTER
 FACILITY
 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802 WITHIN CALIFORNIA, CALL 1-800-552-7275

Attachment C

Laboratory Analytical Reports



EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207

Lab Proj. ID: 9709945

Sampled: 09/17/97
Received: 09/18/97
Analyzed: see below

Attention: Christa Marting

Reported: 09/22/97

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No:	9709945-01			
Sample Desc:	SOLID,WO, 10'			
Cadmium	mg/Kg	09/18/97	0.50	N.D.
Chromium	mg/Kg	09/18/97	0.50	18
Lead	mg/Kg	09/18/97	5.0	27
Nickel	mg/Kg	09/18/97	2.5	24
TRPH (SM 5520 E&F)	mg/Kg	09/19/97	50	200
Zinc	mg/Kg	09/18/97	0.50	35

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

RECEIVED

SEP 29 1997

EA ENGINEERING SCIENCE
AND TECHNOLOGY
LAFAYETTE, CA

Page:

1





EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WO, 10'
Matrix: SOLID
Analysis Method: EPA 8240
Lab Number: 9709945-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/19/97
Reported: 09/22/97

QC Batch Number: MS0918978240EXA
Instrument ID: F2

Volatile Organics (EPA 8240)

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





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

EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WO, 10'
Matrix: SOLID
Analysis Method: EPA 8240
Lab Number: 9709945-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/19/97
Reported: 09/22/97

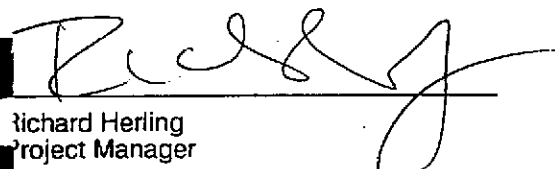
QC Batch Number: MS0918978240EXA
Instrument ID: F2

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	70	121
Toluene-d8	81	117
4-Bromofluorobenzene	74	121

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager






EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Attention: Christa Marting

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WO, 10'
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9709945-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/19/97
Reported: 09/22/97

QC Batch Number: MS0915978270EXB
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzyl alcohol	250	N.D.
Bis(2-chloroethoxy)methane	250	N.D.
Bis(2-chloroethyl)ether	250	N.D.
Bis(2-chloroisopropyl)ether	250	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	250	N.D.
Butyl benzyl phthalate	250	N.D.
4-Chloroaniline	500	N.D.
2-Chloronaphthalene	250	N.D.
4-Chloro-3-methylphenol	250	N.D.
2-Chlorophenol	250	N.D.
4-Chlorophenyl phenyl ether	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Dibenzofuran	250	N.D.
Di-n-butyl phthalate	500	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
3,3'-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	250	N.D.
Diethyl phthalate	250	N.D.
2,4-Dimethylphenol	250	N.D.
Dimethyl phthalate	250	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	250	N.D.
2,6-Dinitrotoluene	250	N.D.
Di-n-octyl phthalate	250	N.D.
Fluoranthene	250	N.D.





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

EA Engineering Science & Tech
 3468 Mt Diablo Blvd Ste B100
 Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207
 Sample Descript: WO, 10'
 Matrix: SOLID
 Analysis Method: EPA 8270
 Lab Number: 9709945-01

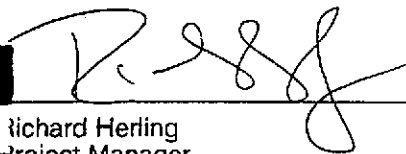
Sampled: 09/17/97
 Received: 09/18/97
 Extracted: 09/18/97
 Analyzed: 09/19/97
 Reported: 09/22/97

QC Batch Number: MS0915978270EXB
 Instrument ID: F4

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg	
Fluorene	250	N.D.	
Hexachlorobenzene	250	N.D.	
Hexachlorobutadiene	250	N.D.	
Hexachlorocyclopentadiene	500	N.D.	
Hexachloroethane	250	N.D.	
Indeno(1,2,3-cd)pyrene	250	N.D.	
Isophorone	250	N.D.	
2-Methylnaphthalene	250	N.D.	
2-Methylphenol	250	N.D.	
4-Methylphenol	250	N.D.	
Naphthalene	250	N.D.	
2-Nitroaniline	500	N.D.	
3-Nitroaniline	500	N.D.	
4-Nitroaniline	500	N.D.	
Nitrobenzene	250	N.D.	
2-Nitrophenol	250	N.D.	
4-Nitrophenol	500	N.D.	
N-Nitrosodiphenylamine	250	N.D.	
N-Nitroso-di-n-propylamine	250	N.D.	
Pentachlorophenol	500	N.D.	
Phenanthrene	250	N.D.	
Phenol	250	N.D.	
Pyrene	250	N.D.	
1,2,4-Trichlorobenzene	250	N.D.	
2,4,5-Trichlorophenol	500	N.D.	
2,4,6-Trichlorophenol	250	N.D.	
Surrogates	Control Limits %	% Recovery	
2-Fluorophenol	25	121	54
Phenol-d5	24	113	52
Nitrobenzene-d5	23	120	42
2-Fluorobiphenyl	30	115	52
2,4,6-Tribromophenol	19	122	50
p-Terphenyl-d14	18	137	26

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

SEQUOIA ANALYTICAL - ELAP #1210



Richard Herling
 Project Manager





EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Attention: Christa Marting

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WO, 10'
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9709945-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/19/97
Reported: 09/22/97

QC Batch Number: GC0915970HBPEXB
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern: Unidentified HC	20	440
		C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager





EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WO, 10'
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9709945-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/17/97
Analyzed: 09/18/97
Reported: 09/22/97

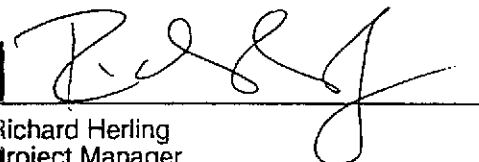
QC Batch Number: GC091797BTEXEXC
Instrument ID: GCHP22

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	11
Benzene	0.0050	0.024
Toluene	0.0050	0.011
Ethyl Benzene	0.0050	0.064
Xylenes (Total)	0.0050	0.11
Chromatogram Pattern: Weathered Gas		C8-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70	130
4-Bromofluorobenzene	60	140
		125
		158 Q

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

SEQUOIA ANALYTICAL - ELAP #1210


Richard Herling
Project Manager





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709945 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	BLK091597	BLK091597	BLK091597	BLK091597
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/15/97	9/15/97	9/15/97	9/15/97
Analyzed Date:	9/16/97	9/16/97	9/16/97	9/16/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	1950	1950	1740	2060
MS % Recovery:	59	59	53	62
Dup. Result:	2180	2180	1940	2280
MSD % Recov.:	66	66	59	69
RPD:	11	11	11	10
RPD Limit:	0-40	0-40	0-40	0-40

LCS #:	SB091897	SB091897	SB091897	SB091897
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/19/97	9/19/97	9/19/97	9/19/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	2100	2070	1840	1070
LCS % Recov.:	64	63	56	32

MS/MSD LCS Control Limits	26-90	25-102	28-104	41-126
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Please Note:
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** MS= Matrix Spike, MSD= MS Duplicate, RPD= Relative % Difference

SEQUOIA ANALYTICAL

Richard Herling
Project Manager





E.A. Engineering Science & Tech. 3468 Mt. Diablo Blvd., Ste. B-100 Lafayette, CA 94549 Attention: Christa Marting	Client Project ID: Exxon 7-0238, 5180238.3207 Matrix: Solid Work Order #: 9709945 01	Reported: Sep 25, 1997
--	--	------------------------

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol	Acenaphthene	4-Nitrophenol
QC Batch#:	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	BLK091597	BLK091597	BLK091597	BLK091597
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/15/97	9/15/97	9/15/97	9/15/97
Analyzed Date:	9/16/97	9/16/97	9/16/97	9/16/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	1960	1680	1810	1100
MS % Recovery:	59	51	55	33
Dup. Result:	2140	1930	1980	1490
MSD % Recov.:	65	58	60	45
RPD:	8.8	14	9.0	30
RPD Limit:	0-40	0-40	0-40	0-40

LCS #:	SB091897	SB091897	SB091897	SB091897
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/19/97	9/19/97	9/19/97	9/19/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	1990	1760	1830	1290
LCS % Recov.:	60	53	55	39

MS/MSD LCS Control Limits	38-107	26-103	31-137	11-114
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** MS= Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

SEQUOIA ANALYTICAL

Richard Herling
Richard Herling
Project Manager





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709945 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	BLK091597	BLK091597	BLK091597
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	9/15/97	9/15/97	9/15/97
Analyzed Date:	9/16/97	9/16/97	9/16/97
Instrument I.D.#:	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	1650	1100	1700
MS % Recovery:	50	33	52
Dup. Result:	1970	1530	1820
MSD % Recov.:	60	46	55
RPD:	18	33	6.8
RPD Limit:	0-40	0-40	0-40

LCS #:	SB091897	SB091897	SB091897
Prepared Date:	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/19/97	9/19/97	9/19/97
Instrument I.D.#:	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	1950	1420	1980
LCS % Recov.:	59	43	60

MS/MSD LCS Control Limits	28-89	17-109	35-142
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SEQUOIA ANALYTICAL

Richard Herling
Project Manager





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709945 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	Ms0918978240EXA	Ms0918978240EXA	Ms0918978240EXA	Ms0918978240EXA	Ms0918978240EXA
Analy. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Prep. Method:					

Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	970937601	970937601	970937601	970937601	970937601
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg
Result:	1900	2300	2400	2200	2200
MS % Recovery:	76	92	96	88	88
Dup. Result:	2000	2300	2400	2200	2200
MSD % Recov.:	80	92	96	88	88
RPD:	5.1	0.0	0.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	VB091997	VB091997	VB091997	VB091997	VB091997
Prepared Date:	9/19/97	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/19/97	9/18/97	9/18/97	9/18/97	9/18/97
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg
LCS Result:	2300	2600	2700	2500	2400
LCS % Recov.:	92	104	108	100	96

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
Control Limits					

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

SEQUOIA ANALYTICAL

Richard Herling
Project Manager





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
 3468 Mt. Diablo Blvd., Ste. B-100 Matrix: ~Solid
 Lafayette, CA 94549
 Attention: Christa Marting Work Order #: 9709945 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME0918976010MDE	ME0918976010MDE	ME0918976010MDE	ME0918976010MDE
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050

Analyst:	R. Butler	R. Butler	R. Butler	R. Butler
MS/MSD #:	970984001	970984001	970984001	970984001
Sample Conc.:	N.D.	N.D.	84	73
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
Result:	42	44	130	120
MS % Recovery:	84	88	92	94
Dup. Result:	43	46	140	120
MSD % Recov.:	86	92	112	94
RPD:	2.4	4.4	7.4	0.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	BLK091897	BLK091897	BLK091897	BLK091897
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg
LCS Result:	49	50	51	51
LCS % Recov.:	98	100	102	102

MS/MSD	80-120	80-120	80-120	80-120
LCS	80-120	80-120	80-120	80-120
Control Limits				

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SEQUOIA ANALYTICAL

Richard Herling
 Project Manager

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9709945.EEE <5>





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
 3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
 Lafayette, CA 94549
 Attention: Christa Marting Work Order #: 9709945 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC091797BTEXEXC	GC091797BTEXEXC	GC091797BTEXEXC	GC091797BTEXEXC	GC091797BTEXEXC
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:	A. Porter	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	970987701	970987701	970987701	970987701	970987701
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/17/97	9/17/97	9/17/97	9/17/97	9/17/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
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:	0.16	0.16	0.16	0.46	0.90
MS % Recovery:	80	80	80	77	75
Dup. Result:	0.15	0.15	0.16	0.44	0.90
MSD % Recov.:	75	75	80	73	75
RPD:	6.5	6.5	0.0	4.4	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK091897	BLK091897	BLK091897	BLK091897	BLK091897
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
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:	0.18	0.19	0.18	0.52	1.0
LCS % Recov.:	90	95	90	87	83

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					

Please Note:

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SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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

9709945.EEE <6>





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709945 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0915970HBPEXB
Analy. Method: EPA 8015M
Prep. Method: EPA 3550/DHS

Analyst: B. Sullivan
MS/MSD #: 970961701
Sample Conc.: 56000
Prepared Date: 9/15/97
Analyzed Date: 9/16/97
Instrument I.D.#: GCHP4B
Conc. Spiked: 25 mg/Kg

Result: 50000
MS % Recovery: -10

Dup. Result: 51000
MSD % Recov.: -8

RPD: 2.0
RPD Limit: 0-50

LCS #: BLK091897

Prepared Date: 9/18/97
Analyzed Date: 9/19/97
Instrument I.D.#: GCHP4A
Conc. Spiked: 25 mg/Kg

LCS Result: 21
LCS % Recov.: 84

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

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SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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9709945.EEE <7>





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709945 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte: Total Recoverable
Petroleum Hydrocarbons
QC Batch#: IN091997552000A
Analy. Method: SM 5520EF
Prep. Method:

Analyst: T. Vo
MS/MSD #: 970961501
Sample Conc.: N.D.
Prepared Date: 9/16/97
Analyzed Date: 9/16/97
Instrument I.D.#: MANUAL
Conc. Spiked: 150 mg/Kg

Result: 260
MS % Recovery: 173

Dup. Result: 220
MSD % Recov.: 147

RPD: 17
RPD Limit: 0-30

LCS #: LCS091997
Prepared Date: 9/19/97
Analyzed Date: 9/21/97
Instrument I.D.#: MANUAL
Conc. Spiked: 150 mg/Kg

LCS Result: 110
LCS % Recov.: 73

MS/MSD 60-140
LCS 70-130
Control Limits

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SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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9709945.EEE <8>





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: EA Engineering, Science, and Technology		Page 1 of 1
Address: 3468 Mt. Diablo Blvd. suite B-100 Lafayette CA.		Site Location: 2200 E. 12th St., Oakland
Project #:	Consultant Project #: 5180238. 3207	Consultant Work Release #: 19712880
Project Contact: Christa Marting	Phone #: (510) 283-7077	Laboratory Work Release #:
EXXON Contact: Leslie Thomas	Phone #:	EXXON RAS #: 7-0238
Sampled by (print): Diana Conkle	Sampler's Signature: Diana Conkle	
Shipment Method: lab pick up	Air Bill #:	

TAT 24 hr 48 hr 72 hr 96 hr Standard (10 day)

ANALYSIS REQUIRED 9709945

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	TPH S.M. 5520 TOG	8240 8270 Cd Cr Pb Zn Ni	Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
10'	9-17-97	1445	Soil	None	1	01-A	✓	✓	✓	✓	Run samples for TPH-g, TPH-d, BTEX, and TOG. If you get any hits then run the sample for 8240, 8270, and Cd, Cr, Pb, Zn, and Ni. If TPHg, TPH-d, BTEX, and TOG are ND don't run 8240, 8270 and metals.

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Diana Conkle / EA	9-18-97	0815				
			TParsley	9/18/97	0815	

Pink - Client

Yellow - Sequoia

White - Sequoia



Sequoia
Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549
Attention: Christa Marting

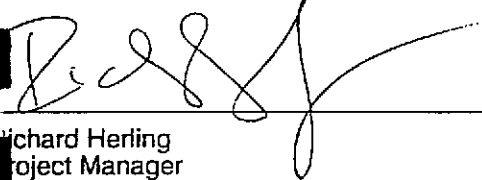
Client Proj. ID: Exxon 7-0238, 5180238.3207
Lab Proj. ID: 9709945

Received: 09/18/97
Reported: 09/22/97

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



Richard Herling
Project Manager





EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207

Lab Proj. ID: 9709947

Sampled: 09/17/97
Received: 09/18/97
Analyzed: see below

Attention: Christa Marting


Reported: 09/22/97

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9709947-01 Sample Desc: SOLID, WOSP-(A-D) Comp				
TRPH (SM 5520 E&F)	mg/Kg	09/19/97	50	70

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

SEQUOIA ANALYTICAL - ELAP #1210


Richard Herling
Project Manager

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SEP 29 1997
EA ENGINEERING, SCIENCE
AND TECHNOLOGY
LAFAYETTE, CA





EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Attention: Christa Marting

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WOSP-(A-D)Comp
Matrix: SOLID
Analysis Method: EPA 8240
Lab Number: 9709947-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/18/97
Reported: 09/22/97

QC Batch Number: MS0918978240EXA
Instrument ID: F2

Volatile Organics (EPA 8240)

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





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

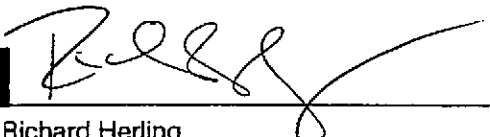
EA Engineering Science & Tech	Client Proj. ID: Exxon 7-0238, 5180238.3207	Sampled: 09/17/97
3468 Mt Diablo Blvd Ste B100	Sample Descript: WOSP-(A-D)Comp	Received: 09/18/97
Lafayette, CA 94549	Matrix: SOLID	Extracted: 09/18/97
Attention: Christa Marting	Analysis Method: EPA 8240	Analyzed: 09/18/97
	Lab Number: 9709947-01	Reported: 09/22/97

QC Batch Number: MS0918978240EXA
Instrument ID: F2

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Surrogates	Control Limits %	% Recovery
1,2-Dichloroethane-d4	70	121
Toluene-d8	81	117
4-Bromofluorobenzene	74	121

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

SEQUOIA ANALYTICAL - ELAP #1210



Richard Herling
Project Manager





EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Attention: Christa Marting

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WOSP-(A-D)Comp
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9709947-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/19/97
Reported: 09/22/97

QC Batch Number: MS0915978270EXB
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzyl alcohol	250	N.D.
Bis(2-chloroethoxy)methane	250	N.D.
Bis(2-chloroethyl)ether	250	N.D.
Bis(2-chloroisopropyl)ether	250	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	250	N.D.
Butyl benzyl phthalate	250	N.D.
4-Chloroaniline	500	N.D.
2-Chloronaphthalene	250	N.D.
4-Chloro-3-methylphenol	250	N.D.
2-Chlorophenol	250	N.D.
4-Chlorophenyl phenyl ether	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Dibenzofuran	250	N.D.
Di-n-butyl phthalate	500	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
3,3'-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	250	N.D.
Diethyl phthalate	250	N.D.
2,4-Dimethylphenol	250	N.D.
Dimethyl phthalate	250	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	250	N.D.
2,6-Dinitrotoluene	250	N.D.
Di-n-octyl phthalate	250	N.D.
Fluoranthene	250	N.D.





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FAX (510) 988-9673
FAX (916) 921-0100

EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WOSP-(A-D)Comp
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9709947-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/19/97
Reported: 09/22/97

QC Batch Number: MS0915978270EXB
Instrument ID: F4

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Fluorene	250	N.D.
Hexachlorobenzene	250	N.D.
Hexachlorobutadiene	250	N.D.
Hexachlorocyclopentadiene	500	N.D.
Hexachloroethane	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Isophorone	250	N.D.
2-Methylnaphthalene	250	N.D.
2-Methylphenol	250	N.D.
4-Methylphenol	250	N.D.
Naphthalene	250	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	250	N.D.
2-Nitrophenol	250	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	250	N.D.
N-Nitroso-di-n-propylamine	250	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	250	N.D.
Phenol	250	N.D.
Pyrene	250	N.D.
1,2,4-Trichlorobenzene	250	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	250	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	25	121	66
Phenol-d5	24	113	66
Nitrobenzene-d5	23	120	52
2-Fluorobiphenyl	30	115	60
2,4,6-Tribromophenol	19	122	60
p-Terphenyl-d14	18	137	42

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager





EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WOSP-(A-D)Comp
Matrix: SOLID
Analysis Method: Title 22
Lab Number: 9709947-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/18/97
Reported: 09/22/97

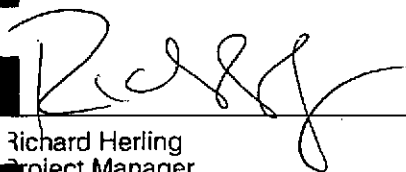
QC Batch Number: ME0918976010MDE

Inorganic Persistent and Bioaccumulative Toxic Substances : TTLC

Analyte	Max. Limit mg/Kg	Detection Limit mg/Kg	Sample Results mg/Kg
Antimony, Sb	500	5.0	N.D.
Arsenic, As	500	5.0	8.9
Barium, Ba	10000	5.0	97
Beryllium, Be	75	0.50	N.D.
Cadmium, Cd	100	0.50	N.D.
Chromium, Cr	2500	0.50	40
Cobalt, Co	8000	2.5	6.8
Copper, Cu	2500	0.50	21
Lead, Pb	1000	5.0	47
Mercury, Hg	20	0.020	0.051
Molybdenum, Mo	3500	2.5	N.D.
Nickel, Ni	2000	2.5	56
Selenium, Se	100	5.0	N.D.
Silver, Ag	500	0.50	N.D.
Thallium, Tl	700	5.0	11
Vanadium, V	2400	2.5	26
Zinc, Zn	5000	0.50	68

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

SEQUOIA ANALYTICAL - ELAP #1210


Richard Herling
Project Manager





EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WOSP-(A-D)Comp
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9709947-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/19/97
Reported: 09/22/97

Attention: Christa Marting

GC Batch Number: GC0915970HBPEXB
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	312 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager





EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549

Client Proj. ID: Exxon 7-0238, 5180238.3207
Sample Descript: WOSP-(A-D)Comp
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9709947-01

Sampled: 09/17/97
Received: 09/18/97
Extracted: 09/18/97
Analyzed: 09/19/97
Reported: 09/22/97

QC Batch Number: GC091797BTEXEXC
Instrument ID: GCHP01

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	125
4-Bromofluorobenzene	60 140	111

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709947 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC0915970HBPEXB
Analy. Method: EPA 8015M
Prep. Method: EPA 3550/DHS

Analyst: B. Sullivan
MS/MSD #: 970961701
Sample Conc.: 56000
Prepared Date: 9/15/97
Analyzed Date: 9/16/97
Instrument I.D.#: GCHP4B
Conc. Spiked: 25 mg/Kg

Result: 50000
MS % Recovery: -10

Dup. Result: 51000
MSD % Recov.: -8

RPD: 2.0
RPD Limit: 0-50

LCS #: BLK091897
Prepared Date: 9/18/97
Analyzed Date: 9/19/97
Instrument I.D.#: GCHP4A
Conc. Spiked: 25 mg/Kg

LCS Result: 21
LCS % Recov.: 84

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

Please Note:
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SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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

9709947.EEE <1>





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709947 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC091797BTEXEXC	GC091797BTEXEXC	GC091797BTEXEXC	GC091797BTEXEXC	GC091797BTEXEXC
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:	A. Porter	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	970987701	970987701	970987701	970987701	970987701
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/17/97	9/17/97	9/17/97	9/17/97	9/17/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
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:	0.16	0.16	0.16	0.46	0.90
MS % Recovery:	80	80	80	77	75
Dup. Result:	0.15	0.15	0.16	0.44	0.90
MSD % Recov.:	75	75	80	73	75
RPD:	6.5	6.5	0.0	4.4	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK091897	BLK091897	BLK091897	BLK091897	BLK091897
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
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:	0.18	0.19	0.18	0.52	1.0
LCS % Recov.:	90	95	90	87	83

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					

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.

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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

9709947.EEE <2>





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709947 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro- benzene	N-Nitroso-Di- N-propylamine
QC Batch#:	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	BLK091597	BLK091597	BLK091597	BLK091597
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/15/97	9/15/97	9/15/97	9/15/97
Analyzed Date:	9/16/97	9/16/97	9/16/97	9/16/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	1950	1950	1740	2060
MS % Recovery:	59	59	53	62
Dup. Result:	2180	2180	1940	2280
MSD % Recov.:	66	66	59	69
RPD:	11	11	11	10
RPD Limit:	0-40	0-40	0-40	0-40

LCS #:	SB091897	SB091897	SB091897	SB091897
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/19/97	9/19/97	9/19/97	9/19/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	2100	2070	1840	1070
LCS % Recov.:	64	63	56	32

MS/MSD LCS Control Limits	26-90	25-102	28-104	41-126
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Please Note:

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SEQUOIA ANALYTICAL

Richard Herling
Project Manager





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709947 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol	Acenaphthene	4-Nitrophenol
QC Batch#:	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	BLK091597	BLK091597	BLK091597	BLK091597
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/15/97	9/15/97	9/15/97	9/15/97
Analyzed Date:	9/16/97	9/16/97	9/16/97	9/16/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	1960	1680	1810	1100
MS % Recovery:	59	51	55	33
Dup. Result:	2140	1930	1980	1490
MSD % Recov.:	65	58	60	45
RPD:	8.8	14	9.0	30
RPD Limit:	0-40	0-40	0-40	0-40

LCS #:	SB091897	SB091897	SB091897	SB091897
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/19/97	9/19/97	9/19/97	9/19/97
Instrument I.D.#:	F4	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	1990	1760	1830	1290
LCS % Recov.:	60	53	55	39

MS/MSD LCS Control Limits	38-107	26-103	31-137	11-114
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SEQUOIA ANALYTICAL

Richard Herling
Richard Herling
Project Manager





E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
Lafayette, CA 94549
Attention: Christa Marting Work Order #: 9709947 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS0915978270EXB	MS0915978270EXB	MS0915978270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550

Analyst:	E. Manuel	E. Manuel	E. Manuel
MS/MSD #:	BLK091597	BLK091597	BLK091597
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	9/15/97	9/15/97	9/15/97
Analyzed Date:	9/16/97	9/16/97	9/16/97
Instrument I.D.#:	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
Result:	1650	1100	1700
MS % Recovery:	50	33	52
Dup. Result:	1970	1530	1820
MSD % Recov.:	60	46	55
RPD:	18	33	6.8
RPD Limit:	0-40	0-40	0-40

LCS #:	SB091897	SB091897	SB091897
Prepared Date:	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/19/97	9/19/97	9/19/97
Instrument I.D.#:	F4	F4	F4
Conc. Spiked:	3300 µg/Kg	3300 µg/Kg	3300 µg/Kg
LCS Result:	1950	1420	1980
LCS % Recov.:	59	43	60

MS/MSD LCS Control Limits	28-89	17-109	35-142
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Please Note:
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SEQUOIA ANALYTICAL

Richard Herling
Richard Herling
Project Manager





E.A. Engineering Science & Tech. 3468 Mt. Diablo Blvd., Ste. B-100 Lafayette, CA 94549 Attention: Christa Marting	Client Project ID: Exxon 7-0238, 5180238.3207 Matrix: Solid Work Order #: 9709947 01	Reported: Sep 25, 1997
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QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS0918978240EXA	MS0918978240EXA	MS0918978240EXA	MS0918978240EXA	MS0918978240EXA
Analy. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Prep. Method:					

Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
MS/MSD #:	970937601	970937601	970937601	970937601	970937601
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg
Result:	1900	2300	2400	2200	2200
MS % Recovery:	76	92	96	88	88
Dup. Result:	2000	2300	2400	2200	2200
MSD % Recov.:	80	92	96	88	88
RPD:	5.1	0.0	0.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	VB091897	VB091897	VB091897	VB091897	VB091897
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/18/97
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg	2500 µg/Kg
LCS Result:	2500	2600	2900	2700	2600
LCS % Recov.:	100	104	116	108	104

MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	65-135	70-130	70-130	70-130	70-130
Control Limits					

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

Richard Herling
Project Manager

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E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
 3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
 Lafayette, CA 94549
 Attention: Christa Marting Work Order #: 9709947 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte: Total Recoverable
 Petroleum Hydrocarbons
QC Batch#: IN091997552000A
Analy. Method: SM 5520EF
Prep. Method:

Analyst: T. Vo.
MS/MSD #: 970961501
Sample Conc.: N.D.
Prepared Date: 9/16/97
Analyzed Date: 9/16/97
Instrument I.D.#: MANUAL
Conc. Spiked: 150 mg/Kg

Result: 260
MS % Recovery: 173

Dup. Result: 220
MSD % Recov.: 147

RPD: 17
RPD Limit: 0-30

LCS #: LCS091997
Prepared Date: 9/19/97
Analyzed Date: 9/21/97
Instrument I.D.#: MANUAL
Conc. Spiked: 250 mg/Kg

LCS Result: 110
LCS % Recov.: 73

MS/MSD 60-140
LCS 70-130
Control Limits

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

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E.A. Engineering Science & Tech. Client Project ID: Exxon 7-0238, 5180238.3207
 3468 Mt. Diablo Blvd., Ste. B-100 Matrix: Solid
 Lafayette, CA 94549
 Attention: Christa Marting Work Order #: 9709947 01 Reported: Sep 25, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel	Mercury
QC Batch#:	ME0918976010MDE	ME0918976010MDE	ME0918976010MDE	ME0918976010MDE	ME0922977471M4A
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 7471
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050	EPA 7471

Analyst:	R. Butler	R. Butler	R. Butler	R. Butler	M. Heid
MS/MSD #:	970984001	970984001	970984001	970984001	9709A4801
Sample Conc.:	N.D.	N.D.	84	73	0.29
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/22/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/22/97
Instrument I.D.#:	MTAJ2	MTAJ2	MTAJ2	MTAJ2	MPE4
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg	0.40 mg/Kg
Result:	42	44	130	120	0.62
MS % Recovery:	84	88	92	94	83
Dup. Result:	43	46	140	120	0.67
MSD % Recov.:	86	92	112	94	95
RPD:	2.4	4.4	7.4	0.0	7.8
RPD Limit:	0-20	0-20	0-20	0-20	0-30

LCS #:	BLK091897	BLK091897	BLK091897	BLK091897	BLK092297
Prepared Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/22/97
Analyzed Date:	9/18/97	9/18/97	9/18/97	9/18/97	9/22/97
Instrument I.D.#:	MTAJ2	MTAJ2	MTAJ2	MTAJ2	MPE4
Conc. Spiked:	50 mg/Kg	50 mg/Kg	50 mg/Kg	50 mg/Kg	0.40 mg/Kg
LCS Result:	49	50	51	51	0.34
LCS % Recov.:	98	100	102	102	85

MS/MSD	80-120	80-120	80-120	80-120	
LCS	80-120	80-120	80-120	80-120	
Control Limits					75-125

Please Note:

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SEQUOIA ANALYTICAL

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

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CHAIN OF CUSTODY

Consultant's Name: EA Engineering, Science, and Technology Page 1 of 1

Address: 3400B Mt. Diablo Blvd, Suite B100, Lafayette Site Location: 2200 E. 12th St, Oakland

Project #: _____ Consultant Project #: 15180238.3207 Consultant Work Release #: 19712880

Project Contact: Christa Marting Phone #: (510) 283-7077 Laboratory Work Release #: _____

EXXON Contact: Leslie Thomas Phone #: _____ EXXON RAS #: 7-0238

Sampled by (print): D. Conkle Sampler's Signature: Diana Conkle

Shipment Method: drop off at lab Air Bill #: _____

TAT: 24 hr 48 hr 72 hr 96 hr Standard (10 day) ANALYSIS REQUIRED 9709947

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	TPH S.M. 5520 TOG	8240 / 8270	CAM 17	Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
WOSP A	9-17-97	1530	Pea Gravel	None	1	01-A	✓	✓	✓	✓/✓	✓	Composite WOSP A - WOSP D into one sample in the lab
WOSP B	↓	↓	↓	↓	1	B	✓	✓	✓	✓/✓	✓	
WOSP C	↓	↓	↓	↓	1	C	✓	✓	✓	✓/✓	✓	
WOSP D	↓	↓	↓	↓	1	D	✓	✓	✓	✓/✓	✓	
												Bulk sample Pb-TPH-g, TPH-d, BTEX, and TOG First, if you get any hits then run 8240, 8270 and Cam 17. If TPHg, TPH-d, TOG and BTEX were NP don't run 8240, 8270.

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>Diana Conkle / EA</u>	<u>9-18-97</u>	<u>0815</u>				<u>Scan 17</u>
			<u>Tara Parsley</u>	<u>9/18/97</u>	<u>0815</u>	

Pink - Client

Yellow - Sequoia

White - Sequoia



EA Engineering Science & Tech
3468 Mt Diablo Blvd Ste B100
Lafayette, CA 94549
Attention: Christa Marting

Client Proj. ID: Exxon 7-0238, 5180238.3207
Lab Proj. ID: 9709947

Received: 09/18/97
Reported: 09/22/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 18 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

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