IN-0111-08

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL 312-663-9415
International Specialists in the Environment

US EPA RECORDS CENTER REGION 5
540982

Date Received for Review: 6-19-86 Date Review Completed: 6-20-86

To: Larry Lumah

From: Cynthia Pugh

Subject: Mobil Oil Corp. (Indiana)
(RS- 8307-4C)

Sample Description: Case # 5839: Low Soil Organics

Project Data Status: Still Awaiting Low Soil Metals + Cyanide

FIT Data Review Findings: DATA ACCEPTABLE-
See attached review and qualifications noted. Also Refer to User's Comments Section.

Additional Comments:

Book No. 5
Page No. 124

recycled paper

RECEIVED JUN 1 9 1986

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 6/17/86

SUBJECT: Review of Region V CLP Data
Received for Review on _____21 MAY 86_____

FROM: Curtis Ross, Director (5SCRL) Francis Thomas
Central Regional Laboratory

TO; Data User:_____FIT_____

_____

We hve reviewed the data for the following case(s).

SITE NAME_____MOBIL OIL CORP._____SMO Case No. _5839_____
EPA DATA SET NO__SF_3170___NO. OF SAMPLES_3_____D.U./ACTIVITY NUMBERS__Y905/C48500___

CRL No:___86FL05S87 - 86FL05S89_____

SMO Traffic No._____EH 601 TO EH 603_____

CLP Laboratory: ANALYTICAL RESOURCES____ Hrs. Required for Review:__4_____

Following are our findings.

1 TIMES	ACCEPTABLE
2 SURROGATES	4/6 PESTICIDES OUT. THIS MAY BE DUE TO THE SAMPLE MATRIX PROBLEMS AND REQUIRED DILUTIONS. OTHER FRACTION ARE ACCEPTABLE.
3 LAB BLANK	ACCEPTABLE
4 TUNING	ACCEPTABLE
5 CALIBRATION	INITIAL FOR VOA;
86-04-24	5 RF-AVE BETWEEN <0.30 AND >0.05 2-BUTANONE <0.05, THEREFORE THE COMPOUND WAS NOT ANALYZED FOR. THE %RSD ARE ACCEPTABLE.

Reviewed 4/22/86

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by contractor lab.
( ) Data are unacceptable.

cc: Dr. Alfred Haeber/ Joan Fisk/Gary Ward. EPA Support Services.
Ross K. Robeson, EMSL-LasVegas
Don Trees, CLP/Sample Management Office

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SITE NAME_____MOBIL OIL CORP._____SMO Case No. _5839_____

FOR SV;
86-05-01 ACCEPTABLE

CONTINUOUS
FOR VOA;
86-04-25 4 RF BETWEEN <0.30 AND >0.05
2-BUTANONE <0.05, THEREFORE, IS NOT ANALYZED FOR.
4 %D > 25%.
FOR SV;
86-05-05 RF ACCEPTABLE
TC TC 2 %D >25%.

G PESTICIDES ACCEPTABLE

RECEIVED JUN 1 9 1986

<< << << << U S E R ' S I N F O R M A T I O N >> >> >> >>

SITE NAME_____MOBIL OIL CORP._____SMO Case No. _5839_____

DATE: 4 JUNE 86 **REVIEWER:** TOM CLYNE
ECOLOGY & ENVIRONMENT

SUMMARY

THERE ARE SOME VERY HIGH HITS THAT CAN BE USED FOR HRS FOUND IN THIS CASE. THERE ARE VOA AROMATICS FOR TOLUENE, ETHYLBENZENE AND TOTAL XYLENES. IN THE SV FRACTION, PAH's WERE FOUND FOR NAPHTHALENE, METHYLNAPHTHALENE, FLUORENE AND PHENANTHRENE. 2-BUTANONE WAS FOUND IN THE SAMPLES AND ACCORDING TO CALIBRATION PROTOCOL WAS NOT ANALYZED FOR. NO BIG DEAL, WE NORMALLY DON'T USE IT ANYWAY. THE ASSOCIATED TIC's FOR VOA ARE NUMEROUS HYDROCARBONS WHILE THE SV HAD BRANCH CHAIN HYDROCARBONS, HYDROCARBONS AND ISOMERS OF NAPHTHALENE.

PLEASE CHECK THE OADS TO SUMMARY FORM FOR CORRECT TRANSFER OF VALUES. THE HRS HITS ARE CIRCLED ON THE FORM AND THE SEMI-QUANTATIVE VALUES ARE IN BOXES.

THE CHROMATOGRAPHS FOR THE SV ARE TYPICAL "PICKET-FENCE" CURVES FROM HYDROCARBON COMPOUNDS. THE MASS SPECTRA MATCHED THE STANDARDS WELL.

TOM

RECEIVED JUN 1 9 1986

CASE: 5839

	1	2	3	4	5	6	7	8	9	10
ITC										
DTC	FA 69	601 RI	602	603						
SAMPLE	1 kg/KG	→	→	→						
COMPOUND										
chloromethane										
bromomethane										
vinyl chloride										
chloroethane										
methylene chloride										
acetone										
carbon disulfide										
1,1-dichloroethene										
1,1-dichloroethane										
trans-1,2,-dichloroethene										
chloroform										
1,2-dichloroethane										
2-butanone B	500,000 R	1,700,000 B	940,000 B	800,000 R						
1,1,1-trichloroethane										
carbon tetrachloride										
vinyl acetate										
bromodichloromethane										
1,1,2,2-tetrachloroethane										
1,2-dichloropropane										
trans-1,3-dichloropropene										
trichloroethene										
dibromochloromethane										
1,1,2-trichloroethane										
benzene	410,000	390,000	4000 J	100,000 J						
cis-1,3-dichloropropene										
2-chloroethylvinylether										
bromoform										
2-hexanone										
4-methyl-2-pentanone										
tetrachloroethene										
toluene	5,000,000 R	5,700,000		1,000,000						
chlorobenzene										
ethylbenzene	3,800,000	3,000,000	110,000	900,000						
styrene										
total xylenes	10,000,000	10,000,000	900,000	4,000,000						
N-nitrosodiethylamine										
phenol										
aniline										
bis(2-chloroethyl)ether										
2-chlorophenol										
1,3-dichlorobenzene										
1,4-dichlorobenzene										
benzyl alcohol										
1,2-dichlorobenzene										
2-methylphenol										
bis(2-chloroisopropyl)ether										
4-methylphenol										
N-nitroso-di-n-propylamine										
hexachloroethane										
nitrobenzene										
isophrone										
2-nitrophenol										
2,4-dimethylphenol										
benzoic acid										
bis(2-chloroethoxy)methane										
2,4-dichlorophenol										
1,2,4-trichlorobenzene										
naphthalene	700,000	—	85,000 J	1,300,000						
4-chloroaniline										
hexachlorobutadiene										
4-chloro-3-methylphenol										
2-methylnaphthalene	1,800,000	—	2,900,000	1,600,000						
hexachlorocyclopentadiene										
2,4,6-trichlorophenol										
2,4,5-trichlorophenol										
2-chloronaphthalene										
2-nitroaniline										
dimethyl phthalate										
acenapthylene										
3-nitroaniline										
acenaphthene	40,000 J	—	18,000 J							
2,4-dinitrophenol										
4-nitrophenol										
dibenzofuran	190,000 J		23,000 J	220,000 J						
2,4-dinitrotoluene										
2,6-dinitrotoluene										
diethylphthalate										
4-chlorophenyl-phenylether										
flourene	480,000		64,000 J	420,000						
4-nitroaniline										
4,6-dinitro-2-methylphenol										
N-nitrosodiphenylamine										
4-bromophenyl-phenylether										
hexachlorobenzene										

J = Use for HRS

J = Tiny quantative

= unmarked means an artifact

K - indicates an estimated value symbol to - J"

Please check DAPS to summary form

STATE _____ SITE _____ TDD _____ PAGE 1 OF 2, SITE _____

RECEIVED JUN 19 1980

CASE: 5839

	1	2	3	4	5	6	7	8	9	10
ITC										
OTC	E# 601		602	603						
SAMPLE	ug/KG			→						
COMPOUND										
pentachlorophenol										
phenanthrene	1,900,000	–	200,000	940,000						
anthracene										
di-n-butylphthalate										
fluoranthene	58,000 J	–	35,000 J	90,000 J						
benzidine										
pyrene	136,000 J	–	112,000 J	180,000 J						
butylbenzylphthalate										
3,3'-dichlorobenzidine										
benzo(a)anthracene										
bis(2-ethylhexyl)phthlate										
chrysene	140,000 J	–	98,000 J	99,000 J						
di-n-octyl phthlate										
benzo(b&k)fluoranthene										
benzo(a)pyrene										
indeno(1,2,3-cd)pyrene										
dibenzo(a,h)anthracene										
benzo(g,h,i)perylene										
alpha-BHC										
beta-BHC										
delta-BHC										
gamma-BHC(lindane)										
heptachlor										
aldrin										
heptachlor epoxide										
endosulfan I										
dieldrin										
4,4'-DDE										
endrin										
endosulfan II										
4,4'-DDD										
endrin aldehyde										
endosulfan sulfate										
4,4'-DDT										
methoxychlor										
endrin ketone										
chlordane										
toxaphene										
Aroclor-1016										
Aroclor-1221										
Aroclor-1232										
Aroclor-1242										
Aroclor-1248										
Aroclor-1254										
Aroclor-1260										
ELEMENT										
aluminum										
antimony										
arsenic										
barium										
beryllium										
cadmium										
calcium										
chromium										
cobalt										
copper										
iron										
lead										
magnesium										
manganese										
mercury										
nickel										
potassium										
selenium										
silver										
sodium										
thallium										
tin										
vanadium										
zinc										
cyanide CHECK IF ANALYZED ( )										
TENTATIVELY IDENTIFIED ORGANICS										

○ = use for HRS

□ = semi quantative

= unmarked means an artifact.

TC

STATE _____ SITE _____ TDD _____ PAGE 2 OF 2, SET # ____

ANALYTICAL RESOURCES, INC.
3008-B 16th W.
SEATTLE, WA 98119
(206) 285-1577

16 May 1986

RECEIVED JUN 1 9 1986

USEPA Contract Lab Program
Sample Management Office
300 N. Lee Street
Alexandria, VA 22314

RE: Samples submitted for full analysis as low soils from Region 5 listed as Case No. 5839 under Contract Number 68-01-7236

Dear Sir or Madam:

Please find enclosed the data for the above referenced case which includes the following sample numbers:

EH601 EH602 EH603

These samples were submitted as 'low concentration' sediments. They were therefore first extracted as low soils even though they seemed quite heavily contaminated. Screening of the low extracts proved these to be medium or even high level, therefore the samples were reextracted by the medium method. The medium level extracts had to be diluted for all phases of analysis.

Sample EH602 was first analyzed at a 1:10 dilution for semi-volatiles. As samples EH602MS and EH602MSD were analyzed at a 1:5 dilution, EH602 was reanalyzed at a 1:5 dilution and the 1:10 dilution not submitted as no further information of value can be obtained from the run.

All BAN aliquots were run through GPC clean-up before analysis.

Initial analysis of the pesticide/PCB extracts were off scale and required dilution and reinjection. The chromatograms of the initial runs have been included here, but no reports have been generated as no information could be obtained from these runs.

Respectfully submitted,

Susan D Rosa

Susan D. Rosa
Project Manager

In Reference to Case No(s):
[illegible]

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

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Date of Call: [illegible]

Laboratory Name: [illegible]

Lab Contact: [illegible]

Region: IV

Regional Contact: [illegible]

Call Initiated By: ✓ Laboratory ____ Region

In reference to data for the following sample number(s):

Summary of Questions/Issues Discussed:

[illegible]

Summary of Resolution:

[illegible]

Signature [illegible] Date

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

ANALYTICAL RESOURCES, INC.
3008-B 16th W.
SEATTLE, WA 98119
(206) 285-1577

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Data Qualifiers
EPA Report Format

Value - If the result is a value greater than or equal to the detection limits, the value is reported.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample based on necessary concentration/dilution action. The number is the minimum attainable detection limit for the samples as calculated from EPA protocol instrument detection limit calculations (three times the standard deviation of the lowest calibration standard analyzed three times).

U* - Indicates the compound was analyzed for and detected by the data system. Upon confirmation by spectral matching it was found that noise level is too high to confirm by ion matching, therefore a 'real' detection limit is calculated from signal-to-noise ratios (3 X the noise level) and level of response needed to get clean spectra.

T - Indicates trace amounts of analyte were found that in the expert opinion of the analyst are real (above 3 X signal-to-noise ratio with major ions present) but no clean spectra can be obtained because of background levels.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets EPA identification criteria but the result is less than the specified detection limit but greater than zero.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. Value <u>not</u> corrected for blank value.

K - This flag indicates an estimated value calculated from the data system quantitation when the value falls above the calibrated limit of the instrument.

Case No. 5839 Contract Laboratory ANALYTICAL RESOURCES, INC. Contract No. 68-01-7236

Low _____ Medium X

	VOLATILE			SEMI-VOLATILE								PESTICIDE
SMO TRAFFIC NO.	TOLUENE-D8 (81-117)	BFB (74-121)	1,2 DICHLORO-ETHANE-D4 (70-121)	NITRO-BENZENE-D5 (23-120)	2-FLUORO-BIPHENYL (30-115)	TERPHENYL-D14 (18-137)			PHENOL-D6 (24-113)	2-FLUORO-PHENOL (25-121)	2,4,6 TRIBROMO-PHENOL (19-122)	DIBUTYL-CHLORENDATE ** (20-150)
EH601	95.1	113	103	78.3	107	57.9	NR	NR	66.9	72.8	73.5	345*
EH601RI	128*	131*	74.4	NR	NR	NR	NR	NR	NR	NR	NR	NR
EH602	87.8	95.4	87.8	69.2	114	60.6	NR	NR	79.2	72.2	71.6	116
EH602RI	NR	NR	NR	75.9	107	66.7	NR	NR	75.7	70.5	74.4	NR
EH603	77.9*	112	79.5	91.4	98.3	64.2	NR	NR	68.4	61.9	54.3	217*
EH602MS	89.1	101	91.0	70.5	97.5	58.1	NR	NR	78.1	69.5	79.8	189*
EH602MSD	95.5	102	94.6	79.4	101	57.5	NR	NR	83.8	76.0	78.5	162*
VOA5ØMB2	101	106	97.7	NR	NR	NR	NR	NR	NR	NR	NR	NR
VOA5ØMB	101	112	98.3	NR	NR	NR	NR	NR	NR	NR	NR	NR
ABN5ØMB	NR	NR	NR	68.3	82.8	78.2	NR	NR	74.5	73.5	80.9	NR
PEST5ØMB	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	103

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

** ADVISORY LIMITS ONLY

Volatiles: 2 out of 24 ; outside of QC limits

Semi-Volatiles: Ø out of 42 ; outside of QC limits

Pesticides: 4 out of 6 ; outside of QC limits

7/85

Comments: EH603 - d8-Toluene near DL - manually quan'd as missed by data system
EH601 RI - all surrogates near DL for VOA's

RECEIVED JUN 19 1986

FORM II

Case No. 5889 Contractor ANALYTICAL RESOURCES Contract No. 68-01-7236

Low Level _____ Medium Level X

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/Kg)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY
VOA SMO SAMPLE NO. EH602	1,1-Dichloroethene	50,000	Ø	47,860	96.7	66,100	132	-32.0*	22	59-172
	Trichloroethene	↓	↓	44,320	88.6	58,810	118	-28.1*	24	62-137
	Chlorobenzene			63,200	126	81,610	163*	-25.4*	21	60-133
	Toluene			64,750	130	88,150	176*	-30.6*	21	59-139
	Benzene		16,460	62,210	91.5	81,180	129	-26.5*	21	66-142
B/N SMO SAMPLE NO. EH602	1,2,4-Trichlorobenzene	167,000	Ø	124,900	74.9	154,880	92.9	-21.4	23	38-107
	Acenaphthene		18,170	168,480	90.2	172,180	92.4	-2.2	19	31-137
	2,4 Dinitrotoluene		Ø	113,800	68.3	136,670	82.0	-18.3	47	28-89
	Pyrene		111,370	290,233	107	230,950	71.7	22.7	36	35-142
	N-Nitrosodi-n-Propylamine		Ø	157,980	94.8	167,550	101	-6.9	38	41-126
	1,4-Dichlorobenzene		Ø	129,300	77.6	141,730	85.0	-9.2	27	28-104
ACID SMO SAMPLE NO. EH602	Pentachlorophenol	333,000	Ø	257,083	77.1	277,130	83.1	-7.5	47	17-109
	Phenol			248,370	74.5	254,820	76.4	-2.6	35	26-90
	2-Chlorophenol			264,050	79.2	278,770	83.6	-5.4	50	25-102
	4-Chloro-3-Methylphenol			224,800	67.4	252,130	75.6	-11.5	33	26-103
	4-Nitrophenol			119,470	35.2	138,550	47.6	-29.8	50	11-114
PEST SMO SAMPLE NO. EH602	Lindane	2000	Ø	2669	133*	2522	126	-5.7	50	46-127
	Heptachlor			2817	141*	2669	133*	-5.4	31	35-130
	Aldrin			3100	155*	2801	140*	-10.1	43	34-132
	Dieldrin	5000		6270	125	6081	122	-3.1	38	31-134
	Endrin			6672	133	6930	139	3.8	45	42-139
	4,4'-DDT			6256	125	6315	126	Ø.9	50	23-134

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs 5 out of 5; outside QC limits
B/N Ø out of 6; outside QC limits
ACID Ø out of 5; outside QC limits
PEST Ø out of 6; outside QC limits

RECOVERY: VOAs 2 out of 10; outside QC limits
B/N Ø out of 12; outside QC limits
ACID Ø out of 10; outside QC limits
PEST 5 out of 12; outside QC limits

Comments: VOA's normalized to 0.5 gms sample as different amts used (MS = 0.543 gm MSD = 0.572 gm)
ABN's normalized to 0.6 gms (dry wt) sample as different amts extracted [MS = 0.614 gm MSD = 0.654 g]

RECEIVED JUN 19 1986

7/85

FORM III

METHOD BLANK SUMMARY

Case No. 5839 Region 5 Contractor ANALYTICAL RESOURCES, INC. Contract No. 68-01-7236

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (INSL.,TIC OR UNKNOWN)	CONC.	UNITS	CRDL
VOA510MB2	4/26/86	VOA	Soils	Med	FINNI	78-93-3	2-Butanone	21,000	ug/L	10,000
VOA510HB	4/25/86	VOA	Soils	Med	FINNI	—	—	—	—	—
ABN510MB	5/5/86	BAN	Soils	Med	FINNI	—	—	—	—	—
PEST510MB	4/30/86	PEST	Soils	Med	5880	—	—	—	—	—

Comments:

RECEIVED JUN 16 1986

FORM IV

7/85

Organics Analysis Data Sheet
(Page 1)
Instrument Detection Limits

RECEIVED JUN 1 9 1986

Laboratory: ANALYTICAL RESOURCES INC.
Lab Sample ID No: N/A
Sample Matrix: N/A
Date Release Authorized By: Susan D Rose

Case: 5839
QC Report No: 510
Contract No: 68-01-7236
Date Sample Received: N/A

Volatile Compounds

Concentration: N/A

Date Extracted/Prepared: 10/1/85

Date Analyzed: 10/1/85

Conc/Dil Factor: N/A **pH:** 7

Percent Moisture: N/A

CAS No		ng/ml	CAS No		ng/ml
74-87-3	Chloromethane	3.2	79-34-5	1,1,2,2-Tetrachloroethane	2.1
74-83-9	Bromomethane	4.2	78-87-5	1,2-Dichloropropane	1.6
75-01-4	Vinyl Chloride	3.7	10061-02-6	t-1,3-Dichloropropene	1.7
75-00-3	Chloroethane	4.4	79-01-6	Trichloroethene	1.4
75-09-2	Methylene Chloride	3.3	124-48-1	Dibromochloromethane	1.6
67-64-1	Acetone	11.6	79-00-5	1,1,2-Trichloroethane	1.6
75-15-0	Carbon Disulfide	2.0	71-43-2	Benzene	1.7
75-35-4	1,1,-Dichloroethene	4.5	10061-01-5	c-1,3-Dichloropropene	1.7
75-34-3	1,1-Dichloroethane	2.0	110-75-8	2-Chloroethylvinylether	2.6
156-60-5	t-1,2-Dichloroethene	2.7	75-25-2	Bromoform	1.9
67-66-3	Chloroform	2.5	591-78-6	2-Hexanone	1.9
107-06-2	1,2-Dichloroethane	2.3	108-10-1	4-Methyl-2-Pentanone	3.6
78-93-3	2-Butanone	6.3	127-18-4	Tetrachloroethene	1.2
71-55-6	1,1,1-Trichloroethane	1.6	108-88-3	Toluene	1.5
56-23-5	Carbon Tetrachloride	1.7	108-90-7	Chlorobenzene	1.3
108-05-4	Vinyl Acetate	5.8	100-41-4	Ethylbenzene	2.1
75-27-4	Bromodichloromethane	1.3	100-42-5	Styrene	2.7
				Total Xylenes	2.4

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit report the value	B	This flag is used when the analyte is found in the blank as well as a sample
U	Indicates compound was analyzed for but not detected. Report the minimum detection limit	J	Indicates an estimated value

Laboratory: ANALYTICAL RESOURCES, INC.
Case No: 5839

INSTRUMENT DETECTION LIMITS

Organics Analysis Data Sheet
(Page 2)

RECEIVED JUN 1 9 1986

Concentration: N/A

Date Extracted/Prepared: 10/7/85

Date Analyzed: 10/9/85

Conc/Dil Factor: N/A

CAS No		ng/ul	CAS No		ng/ul
62-75-9	N-Nitrosodimethylamine	3.7	83-32-9	Acenaphthene	7.5
108-95-2	Phenol	4.3	51-28-5	2,4-Dinitrophenol	3.3
62-53-3	Aniline	3.1	100-02-7	4-Nitrophenol	2.0
111-44-4	bis(2-Chloroethyl)ether	4.8	132-64-9	Dibenzofuran	3.5
95-57-8	2-Chlorophenol	2.5	121-14-2	2,4-Dinitrotoluene	2.2
541-73-1	1,3-Dichlorobenzene	2.9	606-20-2	2,6-Dinitrotoluene	2.6
106-46-7	1,4-Dichlorobenzene	3.4	64-66-2	Diethylphthalate	1.5
100-51-6	Benzyl Alcohol	4.0	7005-72-3	4-Chlorophenyl phenylether	6.3
95-50-1	1,2-Dichlorobenzene	3.8	86-73-7	Fluorene	2.9
95-48-7	2-Methylphenol	2.2	100-01-6	4-Nitroaniline	7.2
39638-32-9	bis(2-Chloroisopropyl)ether	2.5	534-52-1	4,6-Dinitro-2-methylphenol	1.1
106-44-5	4-Methylphenol	3.5	86-30-6	N-Nitrosodiphenylamine (1)	3.2
621-64-7	N-Nitroso-Dipropylamine	4.8	101-55-3	4-Bromophenyl phenylether	3.2
67-72-1	Hexachloroethane	5.2	118-74-1	Hexachlorobenzene	4.4
98-95-3	Nitrobenzene	3.8	87-86-5	Pentachlorophenol	1.1
78-59-1	Isophorone	2.4	85-01-8	Phenanthrene	4.3
88-75-5	2-Nitrophenol	3.2	120-12-7	Anthracene	3.4
105-67-9	2,4-Dimethylphenol	4.6	84-74-2	Di-n-butylphthalate	4.1
65-85-0	Benzoic Acid	3.3	206-44-0	Fluoranthene	1.6
111-91-1	bis(2-Chloroethoxy)methane	3.6	92-87-5	Benzidine	18
120-83-2	2,4-Dichlorophenol	1.8	129-00-0	Pyrene	2.1
91-20-3	1,2,4-Trichlorobenzene	4.2	85-68-7	Butylbenzylphthalate	4.3
91-20-3	Naphthalene	3.0	91-94-1	3,3'-Dichlorobenzidine	2.0
106-47-8	4-Chloroaniline	1.8	56-55-3	Benzo(a)anthracene	0.5
87-68-3	Hexachlorobutadiene	4.3	117-81-7	Bis(2-Ethylhexyl)phthalate	3.5
59-50-7	4-Chloro-3-methylphenol	1.4	218-01-9	Chrysene	0.9
91-57-6	2-Methylnaphthalene	5.2	117-84-0	Di-n-Octylphthalate	1.0
77-47-4	Hexachlorocyclopentadiene	5.3	205-99-2	Benzo(b)fluoranthene	3.9
88-06-2	2,4,6-Trichlorophenol	2.0	207-08-9	Benzo(k)fluoranthene	3.3
95-95-4	2,4,5-Trichlorophenol	3.0	50-32-8	Benzo(a)pyrene	1.1
91-58-7	2-Chloronaphthalene	1.8	193-39-5	Indeno(123-cd)pyrene	2.1
88-74-4	2-Nitroaniline	1.2	53-70-3	Dibenzo(ah)anthracene	1.9
131-11-3	Dimethylphthalate	3.1	191-24-2	Benzo(ghi)perylene	3.4
208-96-8	Acenaphthylene	0.8			
99-09-2	3-Nitroaniline	6.6			

(1) Cannot be separated from diphenylamine

Laboratory: ANALYTICAL RESOURCES, INC

Case No: 5839

INSTRUMENT DETECTION LIMITS

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUN 1 9 1986

Concentration: N/A

Date Extracted/Prepared: 9/19/85

Date Analyzed: 9/23/85-10/7/85

Conc/Dil Factor: N/A

CAS No		ng/ul
319-84-6	Alpha-BHC	.0023
319-85-7	Beta-BHC	.0030
319-86-8	Delta-BHC	.0032
58-89-9	Gamma-BHC (Lindane)	.0016
76-44-8	Heptachlor	.0032
309-00-2	Aldrin	.0023
1024-57-3	Heptachlor Epoxide	.0053
959-98-8	Endosulfan I	.0046
60-57-1	Dieldrin	.0054
72-55-9	4,4'-DDE	.0076
72-20-8	Endrin	.0082
33213-65-9	Endosulfan II	.0026
72-54-8	4,4'-DDD	.0049
7421-93-4	Endrin Aldehyde	.0108
1031-07-8	Endosulfan Sulfate	.0101
50-29-3	4,4'-DDT	.0106
72-43-5	Methoxychlor	.0349
53494-70-5	Endrin Ketone	.0105
57-74-9	Chlordane	.0347
8001-35-2	Toxaphene	.0295
12674-11-2	Aroclor 1016	.0067
11104-28-2	Aroclor 1221	.0101
11141-16-5	Aroclor 1232	.0379
53469-21-9	Aroclor 1242	.0524
12672-29-6	Aroclor 1248	.0511
11097-69-1	Aroclor 1254	.0846
11096-82-5	Aroclor 1260	.0466

V(i) = Volume of extract injected (ul)

V(s) = Volume of water extracted (ml)

W(s) = Weight of sample extract (g)

V(t) = Volume of total extract (ul)

V(s) N/A **or W(s)** N/A **V(t)** N/A **V(i)** 3.0

Form I

EH601

86FL05587

Organics Analysis Data Sheet
(Page 1)

Laboratory Name ANALYTICAL RESOURCES, INC. Case No 5839

Lab Sample ID No 510B QC Report No: 510

Sample Matrix: Soils Contract No 68-01-7236

Data Release Authorized By: Susan D Rose Date Sample Received: 16 April 1986

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared. 4/25/86

Date Analyzed. 4/25/86

Conc/Dil Factor: 1:1000 pH 6.44

Percent Moisture. (Not Decanted) 55.3

use EH601-R1 for data

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CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	140,000U
74-83-9	Bromomethane	140,000U
75-01-4	Vinyl Chloride	140,000U
75-00-3	Chloroethane	140,000U
75-09-2	Methylene Chloride	69,000U
67-64-1	Acetone	140,000U
75-15-0	Carbon Disulfide	69,000U
75-35-4	1, 1-Dichloroethene	69,000U
75-34-3	1, 1-Dichloroethane	69,000U
156-60-5	Trans-1, 2-Dichloroethene	69,000U
67-66-3	Chloroform	69,000U
107-06-2	1, 2-Dichloroethane	69,000U
78-93-3	2-Butanone	500,000 B
71-55-6	1, 1, 1-Trichloroethane	69,000U
56-23-5	Carbon Tetrachloride	69,000U
108-05-4	Vinyl Acetate	140,000U
75-27-4	Bromodichloromethane	69,000U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	69,000U
10061-02-6	Trans-1, 3-Dichloropropene	69,000U
79-01-6	Trichloroethene	69,000U
124-48-1	Dibromochloromethane	69,000U
79-00-5	1, 1, 2-Trichloroethane	69,000U
71-43-2	Benzene	410,000
10061-01-5	cis-1, 3-Dichloropropene	69,000U
110-75-8	2-Chloroethylvinylether	140,000U
75-25-2	Bromoform	69,000U
108-10-1	4-Methyl-2-Pentanone	140,000U
591-78-6	2-Hexanone	140,000U
127-18-4	Tetrachloroethene	69,000U
79-34-5	1, 1, 2, 2-Tetrachloroethane	69,000U
108-88-3	Toluene	5,400,000 K
108-90-7	Chlorobenzene	69,000U
100-41-4	Ethylbenzene	3,800,000 K
100-42-5	Styrene	69,000U
	Total Xylenes	19,000,000 K

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit report the value

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

atory Name ANALYTICAL RESOURCES, INC.

No 5839

Sample Number
EH601

86FL05887

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

:entration. Low (Medium) (Circle One)

(Extracted) Prepared 4/17/86

Analyzed 5/5/86

:/Dil Factor: 1:5

:cent Moisture (Decanted) 55.3

GPC Cleanup ☒Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

RECEIVED JUN 19 1986

AS umber		ug/l or (ug/Kg) (Circle One)
8-95-2	Phenol	220,000U
1-44-4	bis(-2-Chloroethyl)Ether	220,000U
5-57-8	2-Chlorophenol	220,000U
41-73-1	1 3-Dichlorobenzene	220,000U
06-46-7	1, 4-Dichlorobenzene	220,000U
00-51-6	Benzyl Alcohol	220,000U
5-50-1	1, 2-Dichlorobenzene	220,000U
5-48-7	2-Methylphenol	220,000U
9638-32-9	bis(2-chloroisopropyl)Ether	220,000U
06-44-5	4-Methylphenol	220,000U
521-64-7	N-Nitroso-Di-n-Propylamine	220,000U
67-72-1	Hexachloroethane	220,000U
98-95-3	Nitrobenzene	220,000U
78-59-1	Isophorone	220,000U
88-75-5	2-Nitrophenol	220,000U
105-67-9	2, 4-Dimethylphenol	220,000U
65-85-0	Benzoic Acid	1,100,000U
111-91-1	bis(-2-Chloroethoxy)Methane	220,000U
120-83-2	2, 4-Dichlorophenol	220,000U
120-82-1	1, 2, 4-Trichlorobenzene	220,000U
91-20-3	Naphthalene	700,000
106-47-8	4-Chloroaniline	220,000U
87-68-3	Hexachlorobutadiene	220,000U
59-50-7	4-Chloro-3-Methylphenol	220,000U
91-57-6	2-Methylnaphthalene	1,800,000
77-47-4	Hexachlorocyclopentadiene	220,000U
88-06-2	2, 4, 6-Trichlorophenol	220,000U
95-95-4	2, 4, 5-Trichlorophenol	1,100,000U
91-58-7	2-Chloronaphthalene	220,000U
88-74-4	2-Nitroaniline	1,100,000U
131-11-3	Dimethyl Phthalate	220,000U
208 96-8	Acenaphthylene	220,000U
99-09-2	3-Nitroaniline	1,100,000U

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	160,000J
51-28-5	2, 4-Dinitrophenol	1,100,000U
100-02-7	4-Nitrophenol	1,100,000U
132-64-9	Dibenzofuran	190,000J
121-14-2	2 4-Dinitrotoluene	220,000U
606-20-2	2, 6-Dinitrotoluene	220,000U
84-66-2	Diethylphthalate	220,000U
7005-72-3	4-Chlorophenyl-phenylether	220,000U
86-73-7	Fluorene	450,000
100-01-6	4-Nitroaniline	1,100,000U
534-52-1	4, 6-Dinitro-2-Methylphenol	1,100,000U
86-30-6	N-Nitrosodiphenylamine (1)	220,000U
101-55-3	4-Bromophenyl-phenylether	220,000U
118-74-1	Hexachlorobenzene	220,000U
87-86-5	Pentachlorophenol	1,100,000U
85-01-8	Phenanthrene	1,700,000
120-12-7	Anthracene	220,000U
84-74-2	Di-n-Butylphthalate	220,000U
206-44-0	Fluoranthene	58,000J
129-00-0	Pyrene	130,000J
85-68-7	Butylbenzylphthalate	220,000U
91-94-1	3, 3'-Dichlorobenzidine	450,000U
56-55-3	Benzo(a)Anthracene	220,000U
117-81-7	bis(2-Ethylhexyl)Phthalate	220,000U
218-01-9	Chrysene	140,000J
117-84-0	Di-n-Octyl Phthalate	220,000U
205-99-2	Benzo(b)Fluoranthene	220,000U
207-08-9	Benzo(k)Fluoranthene	220,000U
50-32-8	Benzo(a)Pyrene	220,000U
193-39-5	Indeno(1, 2, 3-cd)Pyrene	220,000U
53-70-3	Dibenz(a h)Anthracene	220,000U
191-24-2	Benzo(g h, i)Perylene	220,000U

(1)-Cannot be separated from diphenylamine

Laboratory Name ANALYTICAL RESOURCES, INC.

Case No 5839

Sample EH601

86FL05887

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration Low Medium (Circle One)

Date Extracted/Prepared 4/17/86

Date Analyzed 4/30/86

Conc/Dil Factor 1:40

Percent Moisture (decanted) 55.3

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

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CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha BHC	12,000u
319-85-7	Beta-BHC	12,000u
319-86-8	Delta-BHC	12,000u
58-89-9	Gamma-BHC (Lindane)	12,000u
76-44-8	Heptachlor	12,000u
309-00-2	Aldrin	12,000u
1024-57-3	Heptachlor Epoxide	12,000u
959-98-8	Endosulfan I	12,000u
60-57-1	Dieldrin	24,000u
72-55-9	4, 4'-DDE	24,000u
72-20-8	Endrin	24,000u
33213-65-9	Endosulfan II	24,000u
72-54-8	4, 4'-DDD	24,000u
1031-07-8	Endosulfan Sulfate	24,000u
50-29-3	4, 4'-DDT	24,000u
72-43-5	Methoxychlor	120,000u
53494-70-5	Endrin Ketone	24,000u
57-74-9	Chlordane	120,000u
8001-35-2	Toxaphene	240,000u
12674-11-2	Aroclor-1016	120,000u
11104-28-2	Aroclor-1221	120,000u
11141-16-5	Aroclor-1232	120,000u
53469-21-9	Aroclor-1242	120,000u
12672-29-6	Aroclor-1248	120,000u
11097-69-1	Aroclor-1254	240,000u
11096-82-5	Aroclor-1260	240,000u

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s NA or W_s 0.407 (dry) V_t 10,000 V_i 2.0

Laboratory Name [illegible]

Case No 5839

Sample Number EH601

86FL05 $87

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

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CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 108-87-2	Cyclohexane, methyl-	VOA	546	2,700,000 J
2. —	UNKNOWN bp 56 (Hydrocarbon)		573	4,700,000 J
3. —	UNKNOWN bp 43 (Hydrocarbon)		612	3,200,000 J
4. —	UNKNOWN bp 43 (Hydrocarbon)		627	2,400,000 J
5. 1186-53-4	Pentane, 2,2,3,4-tetramethyl		651	13,000,000 J
6. —	UNKNOWN bp 43 (Hydrocarbon)		697	4,000,000 J
7. —	UNKNOWN bp 43 (Hydrocarbon)		732	1,800,000 J
8. —	UNKNOWN bp 70		752	1,100,000 J
9. —	UNKNOWN bp 43 (Hydrocarbon)		775	2,100,000 J
10. 921-47-1	Hexane, 2,3,4-trimethyl-		825	3,800,000 J
11. 17301-32-5	Undecane, 4,7-dimethyl-	BAN	799	3,000,000 J
12. —	UNKNOWN bp 57 (Hydrocarbon)		916	5,900,000 J
13. —	UNKNOWN bp 142 (Methylnaphthalene + HC)		934	2,200,000 J
14. 17312-83-3	Undecane, 5,7-dimethyl-		1027	7,500,000 J
15. 571-61-9	Naphthalene, 1,5-dimethyl-		1037	4,600,000 J
16. 581-40-8	Naphthalene, 2,3-dimethyl-		1054	6,700,000 J
17. 573-98-8	Naphthalene, 1,2-dimethyl-		1074	4,100,000 J
18. —	UNKNOWN bp 57 (Dimethylnaphthalene + HC)		1089	4,200,000 J
19. —	UNKNOWN bp 57 (Hydrocarbon)		1129	7,800,000 J
20. —	UNKNOWN bp 83		1180	4,100,000 J
21. —	UNKNOWN bp 57 (Hydrocarbon)		1226	8,400,000 J
22. 62108-21-8	Decane, 6-ethyl-2-methyl-		1270	2,200,000 J
23. —	UNKNOWN bp 43 (Hydrocarbon)		1318	2,500,000 J
24. 1921-70-6	Pentadecane, 2,6,10,14-tetramethyl-		1323	1,700,000 J
25. 629-59-4	Tetradecane		1404	2,000,000 J
26. 74645-98-0	Dodecane, 2,7,10-trimethyl-		1411	890,000 J
27. 31081-18-2	Nonane, 3-methyl-5-propyl-		1486	1,300,000 J
28. 629-59-4	Tetradecane		1564	1,900,000 J
29. 31081-18-2	Nonane, 3-methyl-5-propyl-		1638	1,100,000 J
30. 629-97-0	Docosane		1708	1,100,000 J

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ANALYTICAL RESOURCES, INC. Case No 5839

Lab Sample ID No. 510BR QC Report No: 510

Sample Matrix: Soils Contract No. 68-01-7236

Data Release Authorized By: Susan D Ross Date Sample Received 16 April 1986

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Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared. 4/25/86

Date Analyzed. 4/25/86

Conc/Dil Factor: 1:5000 pH 6.44

Percent Moisture: (Not Decanted) 55.3

Use the data

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	690,000U
74-83-9	Bromomethane	690,000U
75-01-4	Vinyl Chloride	690,000U
75-00-3	Chloroethane	690,000U
75-09-2	Methylene Chloride	340,000U
67-64-1	Acetone	690,000U
75-15-0	Carbon Disulfide	340,000U
75-35-4	1, 1-Dichloroethene	340,000U
75-34-3	1, 1-Dichloroethane	340,000U
156-60-5	Trans-1, 2-Dichloroethene	340,000U
67-66-3	Chloroform	340,000U
107-06-2	1, 2-Dichloroethane	340,000U
78-93-3	2-Butanone	1,700,000B
71-55-6	1, 1, 1-Trichloroethane	340,000U
56-23-5	Carbon Tetrachloride	340,000U
108-05-4	Vinyl Acetate	690,000U
75-27-4	Bromodichloromethane	340,000U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	340,000U
10061-02-6	Trans-1, 3-Dichloropropene	340,000U
79-01-6	Trichloroethene	340,000U
124-48-1	Dibromochloromethane	340,000U
79-00-5	1, 1, 2-Trichloroethane	340,000U
71-43-2	Benzene	390,000
10061-01-5	cis-1, 3-Dichloropropene	340,000U
110-75-8	2-Chloroethylvinylether	690,000U
75-25-2	Bromoform	340,000U
108-10-1	4-Methyl-2-Pentanone	690,000U
591-78-6	2-Hexanone	690,000U
127-18-4	Tetrachloroethene	340,000U
79-34-5	1, 1, 2, 2-Tetrachloroethane	340,000U
108-88-3	Toluene	5,700,000
108-90-7	Chlorobenzene	340,000U
100-41-4	Ethylbenzene	3,000,000
100-42-5	Styrene	340,000U
	Total Xylenes	18,000,000

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value If the result is a value greater than or equal to the detection limit report the value

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Laboratory Name ANALYTICAL RESOURCES, INC.

Case No 5839

Sample Number
EH601-RI

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared NA

Date Analyzed NA

Conc/Dil Factor: NA

Percent Moisture (Decanted) NA

GPC Cleanup ☐Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

RECEIVED JUN 19 1986

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	
65-85-0	Benzoic Acid	
111-91-1	bis(-2-Chloroethoxy)Methane	
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	
95-95-4	2, 4, 5-Trichlorophenol	
91-58-7	2-Chloronaphthalene	
88-74-4	2-Nitroaniline	
131-11-3	Dimethyl Phthalate	
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	
51-28-5	2, 4-Dinitrophenol	
100-02-7	4-Nitrophenol	
132-64-9	Dibenzofuran	
121-14-2	2 4-Dinitrotoluene	
606-20-2	2, 6-Dinitrotoluene	
84-66-2	Diethylphthalate	
7005-72-3	4-Chlorophenyl-phenylether	
86-73-7	Fluorene	
100-01-6	4-Nitroaniline	
534-52-1	4, 6-Dinitro-2-Methylphenol	
86-30-6	N-Nitrosodiphenylamine (1)	
101-55-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	
87-86-5	Pentachlorophenol	
85-01-8	Phenanthrene	
120-12-7	Anthracene	
84-74-2	Di-n-Butylphthalate	
206-44-0	Fluoranthene	
129-00-0	Pyrene	
85-68-7	Butylbenzylphthalate	
91-94-1	3, 3' Dichlorobenzidine	
56-55-3	Benzo(a)Anthracene	
117-81-7	bis(2-Ethylhexyl)Phthalate	
218-01-9	Chrysene	
117-84-0	Di-n-Octyl Phthalate	
205-99-2	Benzo(b)Fluoranthene	
207-08-9	Benzo(k)Fluoranthene	
50-32-8	Benzo(a)Pyrene	
193-39-5	Indeno(1, 2, 3-cd)Pyrene	
53-70-3	Dibenz(a h)Anthracene	
191-24-2	Benzo(g h, i)Perylene	

(1)-Cannot be separated from diphenylamine

Laboratory Name ANALYTICAL RESOURCES, INC.

Case No 5839

Sample Number EH601-RI

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration Low Medium (Circle One)

Date Extracted/Prepared NA

Date Analyzed NA

Conc/Dil Factor NA

Percent Moisture (decanted) NA

GPC Cleanup ☐Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

RECEIVED JUN 1 9 198

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	
319-85-7	Beta-BHC	
319-86-8	Delta-BHC	
58-89-9	Gamma-BHC (Lindane)	
76-44-8	Heptachlor	
309-00-2	Aldrin	
1024-57-3	Heptachlor Epoxide	
959-98-8	Endosulfan I	
60-57-1	Dieldrin	
72-55-9	4, 4'-DDE	
72-20-8	Endrin	
33213-65-9	Endosulfan II	
72-54-8	4, 4'-DDD	
1031-07-8	Endosulfan Sulfate	
50-29-3	4, 4'-DDT	
72-43-5	Methoxychlor	
53494-70-5	Endrin Ketone	
57-74-9	Chlordane	
8001-35-2	Toxaphene	
12674-11-2	Aroclor-1016	
11104-28-2	Aroclor-1221	
11141-16-5	Aroclor-1232	
53469-21-9	Aroclor-1242	
12672-29-6	Aroclor-1248	
11097-69-1	Aroclor-1254	
11096-82-5	Aroclor-1260	

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s NA or W_s NA V_t NA V_i NA

Laboratory Name [illegible]

Case No 5839

Sample No. EH601-RI

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

RECEIVED JUN 1 9 1986

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN bp 43 (Hydrocarbon)	VOA	466	2,300,000 J
2. —	UNKNOWN bp 57 (Hydrocarbon)		516	1,500,000 J
3. 108-08-7	Pentane, 2,4-dimethyl-		559	1,00,000 J
4. —	UNKNOWN bp 56 (Hydrocarbon)		573	4,100,000 J
5. —	UNKNOWN bp 43		611	2,500,000 J
6. —	UNKNOWN bp 43		626	1,800,000 J
7. —	UNKNOW bp 57 (Hydrocarbon)		650	15,000,000 J
8. —	UNKNOWN bp 43 (Hydrocarbon)		697	1,600,000 J
9. —	UNKNOWN bp 43 (Hydrocarbon)		775	1,500,000 J
10. 921-47-1	Hexane, 2,3,4-trimethyl-		825	2,200,000 J
11.				
12.				
13.				
14.				
15.				
16.				
17.				
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EH002

86F105$88

Organics Analysis Data Sheet
(Page 1)

Laboratory Name ANALYTICAL RESOURCES, INC. Case No 5839

Lab Sample ID No 510A QC Report No: 510

Sample Matrix Soils Contract No. 68-01-7236

Data Release Authorized By: Susan D Rosen Date Sample Received 16 April 1986

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 4/25/86 RECEIVED JUN 19 1986

Date Analyzed: 4/25/86

Conc/Dil Factor: 1:1000 pH 6.75

Percent Moisture (Not Decanted) 41.0

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	86,000U
74-83-9	Bromomethane	86,000U
75-01-4	Vinyl Chloride	86,000U
75-00-3	Chloroethane	86,000U
75-09-2	Methylene Chloride	43,000U
67-64-1	Acetone	86,000U
75-15-0	Carbon Disulfide	43,000U
75-35-4	1, 1-Dichloroethene	43,000U
75-34-3	1, 1-Dichloroethane	43,000U
156-60-5	Trans-1, 2-Dichloroethene	43,000U
67-66-3	Chloroform	43,000U
107-06-2	1, 2-Dichloroethane	43,000U
78-93-3	2-Butanone	340,000B
71-55-6	1, 1, 1-Trichloroethane	43,000U
56-23-5	Carbon Tetrachloride	43,000U
108-05-4	Vinyl Acetate	86,000U
75-27-4	Bromodichloromethane	43,000U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	43,000U
10061-02-6	Trans-1, 3-Dichloropropene	43,000U
79-01-6	Trichloroethene	43,000U
124-48-1	Dibromochloromethane	43,000U
79-00-5	1, 1, 2-Trichloroethane	43,000U
71-43-2	Benzene	14,000 J
10061-01-5	cis-1, 3-Dichloropropene	43,000U
110-75-8	2-Chloroethylvinylether	86,000U
75-25-2	Bromoform	43,000U
108-10-1	4-Methyl-2-Pentanone	86,000U
591-78-6	2-Hexanone	86,000U
127-18-4	Tetrachloroethene	43,000U
79-34-5	1, 1, 2, 2-Tetrachloroethane	43,000U
108-88-3	Toluene	43,000U
108-90-7	Chlorobenzene	43,000U
100-41-4	Ethylbenzene	110,000
100-42-5	Styrene	43,000U
	Total Xylenes	900,000

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read: U Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS.

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Laboratory Name

Case No 5839

Sample Number
EH602 - RI

86FL05$88

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 4/17/86

Date Analyzed 5/5/86

Conc/Dil Factor: 1:5

Percent Moisture (Decanted) 41.0

GPC Cleanup ☒Yes ☐No RECEIVED JUN 1 9 1986

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
108-95-2	Phenol	170,000U
111-44-4	bis(-2-Chloroethyl)Ether	
95-57-8	2-Chlorophenol	
541-73-1	1 3-Dichlorobenzene	
106-46-7	1, 4-Dichlorobenzene	
100-51-6	Benzyl Alcohol	
95-50-1	1, 2-Dichlorobenzene	
95-48-7	2-Methylphenol	
39638-32-9	bis(2-chloroisopropyl)Ether	
106-44-5	4-Methylphenol	
621-64-7	N-Nitroso-Di-n-Propylamine	
67-72-1	Hexachloroethane	
98-95-3	Nitrobenzene	
78-59-1	Isophorone	
88-75-5	2-Nitrophenol	
105-67-9	2, 4-Dimethylphenol	
65-85-0	Benzoic Acid	810,000U
111-91-1	bis(-2-Chloroethoxy)Methane	
120-83-2	2, 4-Dichlorophenol	
120-82-1	1, 2, 4-Trichlorobenzene	
91-20-3	Naphthalene	85,000 J
106-47-8	4-Chloroaniline	
87-68-3	Hexachlorobutadiene	
59-50-7	4-Chloro-3-Methylphenol	
91-57-6	2-Methylnaphthalene	290,000
77-47-4	Hexachlorocyclopentadiene	
88-06-2	2, 4, 6-Trichlorophenol	
95-95-4	2, 4, 5-Trichlorophenol	810,000U
91-58-7	2-Chloronaphthalene	
88-74-4	2-Nitroaniline	810,000U
131-11-3	Dimethyl Phthalate	
208-96-8	Acenaphthylene	
99-09-2	3-Nitroaniline	810,000U

CAS Number		ug/l or ug/Kg (Circle One)
83-32-9	Acenaphthene	18,000 J
51-28-5	2, 4-Dinitrophenol	810,000U
100-02-7	4-Nitrophenol	810,000U
132-64-9	Dibenzofuran	23,000 J
121-14-2	2 4-Dinitrotoluene	170,000U
606-20-2	2, 6-Dinitrotoluene	170,000U
84-66-2	Diethylphthalate	170,000U
7005-72-3	4-Chlorophenyl-phenylether	170,000U
86-73-7	Fluorene	60,000 J
100-01-6	4-Nitroaniline	810,000U
534-52-1	4, 6-Dinitro-2-Methylphenol	810,000U
86-30-6	N-Nitrosodiphenylamine (1)	170,000U
101-55-3	4-Bromophenyl-phenylether	170,000U
118-74-1	Hexachlorobenzene	170,000U
87-86-5	Pentachlorophenol	810,000U
85-01-8	Phenanthrene	200,000
120-12-7	Anthracene	170,000U
84-74-2	Di-n-Butylphthalate	170,000U
206-44-0	Fluoranthene	35,000 J
129-00-0	Pyrene	112,000 J
85-68-7	Butylbenzylphthalate	170,000U
91-94-1	3, 3'-Dichlorobenzidine	330,000U
56-55-3	Benzo(a)Anthracene	170,000U
117-81-7	bis(2-Ethylhexyl)Phthalate	170,000U
218-01-9	Chrysene	98,000 J
117-84-0	Di-n-Octyl Phthalate	170,000U
205-99-2	Benzo(b)Fluoranthene	170,000U
207-08-9	Benzo(k)Fluoranthene	170,000U
50-32-8	Benzo(a)Pyrene	170,000U
193-39-5	Indeno(1, 2, 3-cd)Pyrene	170,000U
53-70-3	Dibenz(a h)Anthracene	170,000U
191-24-2	Benzo(g h, i)Perylene	170,000U

(1)-Cannot be separated from diphenylamine

Laboratory Name _____

Case No 5839

Sample Number
EH602

86FL05588

Organics Analysis Data Sheet
(Page 3)

RECEIVED JUN 19 1986

Pesticide/PCBs

Concentration Low Medium (Circle One)

Date Extracted/Prepared 4/19/86

Date Analyzed 4/30/86

Conc/Dil Factor 1:4

Percent Moisture (decanted) 41.0

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	850U
319-85-7	Beta-BHC	850U
319-86-8	Delta-BHC	850U
58-89-9	Gamma-BHC (Lindane)	850U
76-44-8	Heptachlor	850U
309-00-2	Aldrin	850U
1024-57-3	Heptachlor Epoxide	850U
959-98-8	Endosulfan I	850U
60-57-1	Dieldrin	1700U
72-55-9	4,4'-DDE	1700U
72-20-8	Endrin	1700U
33213-65-9	Endosulfan II	1700U
72-54-8	4,4'-DDD	1700U
1031-07-8	Endosulfan Sulfate	1700U
50-29-3	4,4'-DDT	1700U
72-43-5	Methoxychlor	8500U
53494-70-5	Endrin Ketone	1700U
57-74-9	Chlordane	8500U
8001-35-2	Toxaphene	17,000U
12674-11-2	Aroclor-1016	8500U
11104-28-2	Aroclor-1221	8500U
11141-16-5	Aroclor-1232	8500U
53469-21-9	Aroclor-1242	8500U
12672-29-6	Aroclor-1248	8500U
11097-69-1	Aroclor-1254	17,000U
11096-82-5	Aroclor-1260	17,000U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s NA or W_s 0.566 (dry) V_t 10,000 V_i 2.0

Case No 5839

EH602

86FL05 588

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

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	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	—	UNKNOWN bp 56 (Hydrocarbon)	VOA	572	800,000 J
2.	—	UNKNOWN bp 43		611	430,000 J
3.	594-82-1	Butane, 2,2,3,3-tetramethyl		649	3,800,000 J
4.	20278-87-9	Heptane, 3,3,4-trimethyl		671	1,700,000 J
5.	—	UNKNOWN bp 43 (Hydrocarbon)		697	430,000 J
6.	584-94-1	Hexane, 2,3-dimethyl		717	250,000 J
7.	15869-93-9	Octane, 3,5-dimethyl		732	340,000 J
8.	—	UNKNOWN bp 43 (Hydrocarbon)		759	410,000 J
9.	—	UNKNOWN bp 43 (Hydrocarbon)		775	300,000 J
10.	921-47-1	Hexane, 2,3,4-trimethyl		825	900,000 J
11.	—	UNKNOWN bp 57 (Hydrocarbon)	BAN	798	710,000 J
12.	17301-23-4	Undecane, 2,6-dimethyl-		814	630,000 J
13.	62016-34-6	Octane, 2,3,7-trimethyl-		883	520,000 J
14.	—	UNKNOWN bp 57 (Hydrocarbon)		914	1,200,000 J
15.	—	UNKNOWN bp 142 (Methylnaphthalene + HC)		932	560,000 J
16.	1560-96-9	Tridecane, 2-methyl-		983	470,000 J
17.	74645-98-0	Dodecane, 2,7,10-trimethyl-		998	1,000,000 J
18.	—	UNKNOWN bp 57 (Hydrocarbon)		1022	1,200,000 J
19.	581-40-8	Naphthalene, 2,3-dimethyl-		1034	830,000 J
20.	581-40-8	Naphthalene, 2,3-dimethyl-		1051	1,300,000 J
21.	—	UNKNOWN bp 83		1075	1,200,000 J
22.	17301-30-3	Undecane, 3,8-dimethyl-		1088	1,600,000 J
23.	62016-37-9	Octane, 2,4,6-trimethyl-		1124	930,000 J
24.	2131-41-1	Naphthalene, 1,4,5-trimethyl-		1137	780,000 J
25.	—	UNKNOWN bp 57		1178	1,600,000 J
26.	31081-18-2	Nonane, 3-methyl-5-propyl-		1189	600,000 J
27.	—	UNKNOWN bp 57 (Hydrocarbon)		1220	590,000 J
28.	17312-82-2	Undecane, 4,6-dimethyl-		1267	970,000 J
29.	1921-70-6	Pentadecane, 2,6,10,14-tetramethyl-		1318	1,100,000 J
30.	74645-98-0	Dodecane, 2,7,10-trimethyl-		1408	630,000 J

EH603

86FL05$89

Organics Analysis Data Sheet
(Page 1)

Labpratory Name: ANALYTICAL RESOURCES, INC. Case No: 5839

Lab Sample ID No: 501C QC Report No.: 510

Sample Matrix: Soils Contract No: 68-01-7236

Data Release Authorized By: Susan D Rao Date Sample Received: 16 April 1986

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4/25/86 RECEIVED JUN 19 1986

Date Analyzed: 4/25/86

Conc/Dil Factor: 1:2000 pH: 5.51

Percent Moisture: (Not Decanted) 56.6

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	270,000U
74-83-9	Bromomethane	270,000U
75-01-4	Vinyl Chloride	270,000U
75-00-3	Chloroethane	270,000U
75-09-2	Methylene Chloride	140,000U
67-64-1	Acetone	270,000U
75-15-0	Carbon Disulfide	140,000U
75-35-4	1, 1-Dichloroethene	140,000U
75-34-3	1, 1-Dichloroethane	140,000U
156-60-5	Trans-1, 2-Dichloroethene	140,000U
67-66-3	Chloroform	140,000U
107-06-2	1, 2-Dichloroethane	140,000U
78-93-3	2-Butanone	880,000B
71-55-6	1, 1, 1-Trichloroethane	140,000U
56-23-5	Carbon Tetrachloride	140,000U
108-05-4	Vinyl Acetate	270,000U
75-27-4	Bromodichloromethane	140,000U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	140,000U
10061-02-6	Trans-1, 3-Dichloropropene	140,000U
79-01-6	Trichloroethene	140,000U
124-48-1	Dibromochloromethane	140,000U
79-00-5	1, 1, 2-Trichloroethane	140,000U
71-43-2	Benzene	100,000J
10061-01-5	cis-1, 3-Dichloropropene	140,000U
110-75-8	2-Chloroethylvinylether	270,000U
75-25-2	Bromoform	140,000U
108-10-1	4-Methyl-2-Pentanone	270,000U
591-78-6	2-Hexanone	270,000U
127-18-4	Tetrachloroethene	140,000U
79-34-5	1, 1, 2, 2-Tetrachloroethane	140,000U
108-88-3	Toluene	1,100,000
108-90-7	Chlorobenzene	140,000U
100-41-4	Ethylbenzene	980,000
100-42-5	Styrene	140,000U
	Total Xylenes	4,000,000

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

Value — If the result is a value greater than or equal to the detection limit report the value

U — Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution action. (This is not necessarily the instrument detection limit.) The footnote should read U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J — Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicated the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g., 10J). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/ul in the final extract should be confirmed by GC/MS

B — This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action

Other — Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report

Laboratory Name ANALYTICAL RESOURCES, INC.

Case No 5839

Sample Number
EH603

86FL05$89

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration Low (Medium) (Circle One)

Date (Extracted)/Prepared 4/17/86

Date Analyzed 5/5/86

Conc/Dil Factor 1:5

Percent Moisture (Decanted) 56.6

GPC Cleanup ☒Yes ☐No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

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CAS Number		ug/l or (ug/Kg) (Circle One)
108-95-2	Phenol	230,000U
111-44-4	bis(-2-Chloroethyl)Ether	230,000U
95-57-8	2-Chlorophenol	230,000U
541-73-1	1 3-Dichlorobenzene	230,000U
106-46-7	1, 4-Dichlorobenzene	230,000U
100-51-6	Benzyl Alcohol	230,000U
95-50-1	1, 2-Dichlorobenzene	230,000U
95-48-7	2-Methylphenol	230,000U
39638-32-9	bis(2-chloroisopropyl)Ether	230,000U
106-44-5	4-Methylphenol	230,000U
621-64-7	N-Nitroso-Di-n-Propylamine	230,000U
67-72-1	Hexachloroethane	230,000U
98-95-3	Nitrobenzene	230,000U
78-59-1	Isophorone	230,000U
88-75-5	2-Nitrophenol	230,000U
105-67-9	2, 4-Dimethylphenol	230,000U
65-85-0	Benzoic Acid	1,100,000U
111-91-1	bis(-2-Chloroethoxy)Methane	230,000U
120-83-2	2, 4-Dichlorophenol	230,000U
120-82-1	1, 2, 4-Trichlorobenzene	230,000U
91-20-3	Naphthalene	1,300,000
106-47-8	4-Chloroaniline	230,000U
87-68-3	Hexachlorobutadiene	230,000U
59-50-7	4-Chloro-3-Methylphenol	230,000U
91-57-6	2-Methylnaphthalene	1,600,000
77-47-4	Hexachlorocyclopentadiene	230,000U
88-06-2	2, 4, 6-Trichlorophenol	230,000U
95-95-4	2, 4, 5-Trichlorophenol	1,100,000U
91-58-7	2-Chloronaphthalene	230,000U
88-74-4	2-Nitroaniline	1,100,000U
131-11-3	Dimethyl Phthalate	230,000U
208-96-8	Acenaphthylene	230,000U
99-09-2	3-Nitroaniline	1,100,000U

CAS Number		ug/l or (ug/Kg) (Circle One)
83-32-9	Acenaphthene	230,000U
51-28-5	2, 4-Dinitrophenol	1,100,000U
100-02-7	4-Nitrophenol	1,100,000U
132-64-9	Dibenzofuran	220,000J
121-14-2	2 4-Dinitrotoluene	230,000U
606-20-2	2, 6-Dinitrotoluene	230,000U
84-66-2	Diethylphthalate	230,000U
7005-72-3	4-Chlorophenyl-phenylether	230,000U
86-73-7	Fluorene	420,000
100-01-6	4-Nitroaniline	1,100,000U
534-52-1	4, 6-Dinitro-2-Methylphenol	1,100,000U
86-30-6	N-Nitrosodiphenylamine (1)	230,000U
101-55-3	4-Bromophenyl-phenylether	230,000U
118-74-1	Hexachlorobenzene	230,000U
87-86-5	Pentachlorophenol	1,100,000U
85-01-8	Phenanthrene	940,000
120-12-7	Anthracene	230,000U
84-74-2	Di-n-Butylphthalate	230,000U
206-44-0	Fluoranthene	90,000J
129-00-0	Pyrene	180,000J
85-68-7	Butylbenzylphthalate	230,000U
91-94-1	3, 3'-Dichlorobenzidine	450,000U
56-55-3	Benzo(a)Anthracene	230,000U
117-81-7	bis(2-Ethylhexyl)Phthalate	230,000U
218-01-9	Chrysene	99,000J
117-84-0	Di-n-Octyl Phthalate	230,000U
205-99-2	Benzo(b)Fluoranthene	230,000U
207-08-9	Benzo(k)Fluoranthene	230,000U
50-32-8	Benzo(a)Pyrene	230,000U
193-39-5	Indeno(1, 2, 3-cd)Pyrene	230,000U
53-70-3	Dibenz(a h)Anthracene	230,000U
191-24-2	Benzo(g h, i)Perylene	230,000U

(1)-Cannot be separated from diphenylamine

Laboratory Name ANALYTICAL RESOURCES, INC.

Case No 5839

Sample Number
EH603

86FL05S89

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration Low Medium (Circle One)

Date Extracted/Prepared 4/17/86

Date Analyzed 4/30/86

Conc/Dil Factor 1:20

Percent Moisture (decanted) 56.6

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☐Yes

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CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha BHC	6300U
319-85-7	Beta-BHC	6300U
319-86-8	Delta-BHC	6300U
58 89-9	Gamma-BHC (Lindane)	6300U
76-44-8	Heptachlor	6300U
309-00-2	Aldrin	6300U
1024-57-3	Heptachlor Epoxide	6300U
959-98-8	Endosulfan I	6300U
60-57-1	Dieldrin	13,000U
72-55-9	4, 4 -DDE	13,000U
72-20-8	Endrin	13,000U
33213-65-9	Endosulfan II	13,000U
72-54-8	4, 4'-DDD	13,000U
1031-07-8	Endosulfan Sulfate	13,000U
50-29-3	4, 4'-DDT	13,000U
72-43-5	Methoxychlor	63,000U
53494-70-5	Endrin Ketone	13,000U
57-74-9	Chlordane	63,000U
8001-35 2	Toxaphene	130,000U
12674-11-2	Aroclor-1016	63,000U
11104-28-2	Aroclor-1221	63,000U
11141-16-5	Aroclor-1232	63,000U
53469-21-9	Aroclor-1242	63,000U
12672-29-6	Aroclor-1248	63,000U
11097-69-1	Aroclor-1254	130,000U
11096-82-5	Aroclor-1260	130,000U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s NA or W_s 0.378 (dry) V_t 10,000 V_i 2.0

Case No 5839

Sample Number
EH603

86FL05589

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

RECEIVED JUN 19 1986

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	—	UNKNOWN bp 43 (Hydrocarbon)	VOA	465	780,000 J
2.	—	UNKNOWN bp 57 (Hydrocarbon)		516	480,000 J
3.	105-08-7	Pentane, 2,4-dimethyl-		558	410,000 J
4.	—	UNKNOWN bp 56 (Hydrocarbon)		572	1,500,000 J
5.	—	UNKNOWN bp 43 (Hydrocarbon)		611	760,000 J
6.	—	UNKNOWN bp 43 (Hydrocarbon)		626	630,000 J
7.	594-82-1	Butane, 2,2,3,3-tetramethyl-		649	4,600,000 J
8.	16747-28-7	Hexane, 2,3,3-trimethyl-		697	450,000 J
9.	—	UNKNOWN bp 43 (Hydrocarbon)		774	420,000 J
10.	921-47-1	Hexane, 2,3,4-trimethyl-		825	950,000 J
11.	95-63-6	Benzene, 1,2,4-trimethyl-	BAN	532	2,900,000 J
12.	871-83-0	Nonane, 2-methyl-		674	3,000,000 J
13.	—	UNKNOWN bp 43 (Hydrocarbon)		800	4,200,000 J
14.	17301-23-4	Undecane, 2,6-dimethyl-		815	2,400,000 J
15.	—	UNKNOWN bp 57 (Methylnaphthalene + HC)		916	4,900,000 J
16.	—	UNKNOWN bp 142 (Methylnaphthalene + HC)		934	2,400,000 J
17.	—	UNKNOWN bp 57 (Hydrocarbon)		1026	5,800,000 J
18.	—	UNKNOWN bp 57 (Dimethylnaphthalene + HC)		1073	3,600,000 J
19.	—	UNKNOWN bp 57 (Hydrocarbon)		1090	5,000,000 J
20.	—	UNKNOWN bp 57 (Hydrocarbon)		1127	5,100,000 J
21.	—	UNKNOWN bp 57 (Hydrocarbon)		1225	6,000,000 J
22.	—	UNKNOWN bp 57 (Hydrocarbon)		1269	4,300,000 J
23.	—	UNKNOWN bp 43 (Hydrocarbon)		1317	4,000,000 J
24.	—	UNKNOWN bp 57 (Hydrocarbon)		1322	3,000,000 J
25.	—	UNKNOWN bp 57 (Hydrocarbon + Menthene)		1400	3,500,000 J
26.	74645-98-0	Dodecane, 2,7,10-trimethyl-		1410	2,000,000 J
27.	31081-18-2	Nonane, 3-methyl-5-propyl-		1482	1,800,000 J
28.	629-59-4	Tetradecane		1561	2,200,000 J
29.	62238-11-3	Decane, 2,3,5-trimethyl-		1634	1,500,000 J
30.	629-97-0	Docosane		1705	1,400,000 J

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

ESD/Central Regional Laboratory
DATA TRACKING FORM FOR CONTRACT SAMPLES

CRL Data Set No. SF 3170 CERCLIS No. RECEIVED JUN 1 0 1986

SMO Case No. 5839 Site Name and Location: Mobil Oil Corp.

Name of Contractor or EPA Laboratory: ARI Data User: FIT

No. of Samples: 3 Date Samples or Data Received: 5-21-86

1. Have chain-of-custody records been received? YES ✓ NO___
2. Have Traffic Reports or packing lists been received? YES ✓ NO___
3. If no, are Traffic Report or packing list numbers written on the chain-of-custody record? YES___ NO___
4. If no, which Traffic report or packing list numbers are missing?

Are basic data forms in? YES ✓ NO___

Number of samples claimed: 3 Number of samples received: 3

Checked by: Sylvia Griffin Date: 5-22-86

Received by Contract Project Management Section: J Thomas Date: 5/22/86

Review Started: 4 June 86 Reviewer Signature: Tom Cyr

Total time spent on review: 4 Date review completed: 4 June 86

Copied (xeroxed) by: Michael Date: ___

Mailed to Data User by: Melia Sullivan Date: 6/18/86

DATA USERS:

Please fill in the blanks below and return this form to: Sylvia Griffin, Data Management Coordinator, Region V, 5SCRL

Data received by: Cynthia Pugh Date: 6-20-86

Q.A. review received by: Cynthia Pugh Date: 6-20-86

Inorganic Data Complete [ ], Suitable for Intended Purposes [ ] ✓ [ ] if acceptable.
Organic Data Complete [✓], Suitable for Intended Purposes [ ] List problems below.
Dioxin Data Complete [ ], Suitable for Intended Purposes [ ]
SAS Data Complete [ ], Suitable for Intended Purposes [ ]

See Attached "Missing Data Request Form" [ ]
PROBLEMS: Please indicate reasons (if any) why data are not suitable for your uses. Other problems.

Received by Data Management Coordinator, CRL for File: Date:___

Signature: ___