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International Specialists in the Environment

US EPA RECORDS CENTER REGION 5
498560

CRL Receipt Date 7/3 FIT Receipt Date 7/18 Review Completed 7/18/90

TO: Barrett
FROM: Mary Gzyra
SUBJECT: Rooto Corp
PAN: MI1120SB (1 hour charged for review) Case # 14327/5269

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
#	Low Soil	#	Low Soil
	Low Water		Low Water
6	Drinking Water		Drinking Water
	Other		Other

Project Data Status _____ Completed!!

✓ Incomplete, awaiting Soil org & inorg

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

_____ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 6/12

0759:2

recycled paper

7/10

Page 1 of 7

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 7/16/90

7/18/90

SUBJECT: Review of Region V CLP Data Received for Review on 7-3-90

FROM: Curtis Ross, Director (5SCRL) Patrick J. Chuille for
Central Regional Laboratory

TO: Data User: Fit

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

SITE NAME: Rooto Corp. (MI) SMO Case No. 14327SAS5269

EPA Data Set No. _____ No. of Samples: 6 D.U./Activity Numbers 1

CRL No. _____

SMO Traffic No. ECQ65-66, EJR24-26, ELR10

CLP Laboratory: Compuchem Hrs. Required for Review: 12 + 1 = 13.

Following are our findings.

This review covers six water samples (ECQ65, ECQ66, EJR24, EJR25, EJR26 and ELR10) for complete organic analysis at special low levels according to the SAS 5269E requirements.

The reviewers narrative and data qualifiers follow.

Al Venuto
9 July 1990

* Negative results from the semi-volatile acid fractions of EJR25 and EJR26 (and their reanalyses) are R, unusable, due to surrogate recoveries near zero.

( ) Data are acceptable for use.
(✓) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
(X) Data are unacceptable. *See Note above

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

Region V

ORGANIC REGIONAL DATA ASSESSMENT

CASE NO. 14327SAS5269E
SITE Rooto Corp.
LABORATORY Compuchem
NO. OF SAMPLES/ MATRIX 6 water
SDG # ECQ65
REVIEWER (IF NOT ESD) Weston/ESAT
SOW# 5269E (ie 2/88)
REVIEWER'S NAME Al Venuto
DPO: ACTION _____ FYI _____
COMPLETION DATE 9 July 1990

DATA ASSESSMENT SUMMARY

		VOA	BNA	PEST	OTHER
1.	HOLDING TIMES	M	O	O	
2.	GC/MS TUNE/INSTR. PERFORM.	O	O	O	
3.	CALIBRATIONS	O	O	O	
4.	BLANKS	O	O	O	
5.	SURROGATES	O	O/M/Z	O	
6.	MATRIX SPIKE/DUP	O	O	O	
7.	OTHER QC	O	O	O	
8.	INTERNAL STANDARDS	O	O	–	
9.	COMPOUND IDENTIFICATION	O	O	O	
10.	SYSTEM PERFORMANCE	O	O	O	
11.	OVERALL ASSESSMENT	O/M	O/M/Z	O	

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: Negative results from the semi-volatile acid fractions of EJR25 and EJR26 (and their re-analyses are R, unusable, due to surrogate recoveries at or near zero.

AREAS OF CONCERN:

NOTABLE PERFORMANCE:

DATA QUALIFIERS

Contractor: COMPUCHEM LABS.

Case 14327 SAS 5269E

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

① Holding Times:

The seven day holding time from date of sampling to date of analysis for volatiles was exceeded by one day for all samples. All volatile results should therefore be considered J, estimated, for positive values and UJ, estimated quantitation limits, for negative values.

All samples were promptly extracted for semi-volatiles and pesticides and easily met the seven day holding time.

② GC/MS Tuning and GC Instrument Performance:

The GC tuning and mass calibration were all within the required Q.C. limits. The pesticide breakdown in the columns for PCB/pesticides was less than the maximum permissible 20%.

③ Calibration:

The volatile and semi-volatile calibration outliers are listed on the outlier forms. All checks for linearity in the pesticides/PCBs columns were well within the Q.C. limits.

④ Method Blanks:

Both volatile method blanks contained only the common contaminant methylene chloride; all samples also contained this compound.

The semi-volatile method blank SBLK73 contained no compound, but SBLK25 contained

Reviewed by: Al Venuto

Phone: (312) 353-2959

Date: 9 July 1990

DATA QUALIFIERS

Contractor: COMPUCHEM LABS.

Case 14327 SAS5269E

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

the common phthalate bis(2-ethylhexyl) phthalate only; this compound was also found in both of its associated samples.

The pesticide blank contained no TCL compounds.

(5) Surrogate Recoveries:

All volatile surrogate recoveries were within the Q.C. limits.

All base/neutral semi-volatile surrogate recoveries were within the Q.C. limits, but in the acid fraction the recoveries of phenol-D5 and 2-fluorophenol in both samples EJR25 and EJR26 were near zero. These samples were re-extracted and reanalyzed and all acid surrogate recoveries were zero or near zero. A matrix effect was thus demonstrated, but the results from the reanalyzed samples should not be used. The semi-volatile acid fraction results for samples EJR25 and EJR26 should therefore be considered J, estimated, for positive values or R, unusable, for negative values.

For the pesticide fraction, all DBC recoveries were well within the Q.C. limits.

(6) Matrix Spikes and Matrix Spike Duplicates:

All volatile and semi-volatile MS and MSD recoveries and RPDs were within the Q.C. limits.

For the pesticide fraction, the recovery of lindane in EJR24 MSD was marginally below

Reviewed by: Al Venuto

Phone: (312) 353-2959

Date: 9 July 1990

DATA QUALIFIERS

Contractor: COMPUCHEM LABS.

Case 14327 SAS 5269E

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

the QC limit and the RPD for lindane was slightly above the limit. Since no lindane was present in the unspiked sample, no action is recommended.

(7) Field Duplicates and Field Blanks:

Sample EJR26 was identified as a duplicate of EJR25. Neither contained any compounds except methylene chloride (also found in the associated Method Blank and both behaved the same with respect to acid semi-volatile surrogate recoveries.

Sample ELR10 was identified as a field blank; it contained no semi-volatiles or pesticides, but the volatile fraction contained methylene chloride (also found in the associated method blank) plus acetone, chloroform and bromodichloromethane.

(8) Internal Standards Performance:

All IS areas for both volatiles and semi-volatiles were generally well within the Q.C. limits.

(9) Compound Quantitation and Reported Detection Limits:

A list of special low limits was incorporated into the sample data; no dilutions were made, so no adjustments were necessary.

(10) Additional Case-Specific Problems:

None Noted.

Reviewed by: Al Venuto

Phone: (312) 353-2959

Date: 9 July 1990

CALIBRATION OUTLIERS
VOLATILE MSL COMPOUNDS

CASE/SAS # 14327/5269E

CONTRACTOR COMPUCHEM

Instrument # 18	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME: 6-19-90 10:38	6-19-90 10:38			6-20-90 2:04			6-20-90 12:49								
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane															
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride															
Acetone	.066			.044	33.3	J/R	.061								
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone	.022		J/R	.020		J/R	.022		J/R						
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate															
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
Acrolein ~~2-Chloroethylvinylether~~	.020		J/R	.021		J/R	.019		J/R						
Bromoform	.219			.211			.115	47.5	J						
4-Methyl-2-Pentanone															
2-Hexanone	.043		J/R	.031		J/R	.036		J/R						
Tetrachloroethene	.624			.625			.426	31.7	J						
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
~~m~~-Xylenes															
~~o/p-Xylene~~ Acrylonitrile															

AFFECTED SAMPLES:

VBLKGP	VBLKCM
EJR24MS	ECQ65
EJR24MSD	ECQ66
	EJR24
	EJR25
	EJR26
	ELR10

Reviewer's Initials/Date: AV 7-6-90

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 14327/5269E CONTRACTOR COMPUCHEM LABS,

Instrument # 05	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME: 6-13-90 12:07	6-13-90 12:07			6-19-90 14:00			6-23-90 13:58			6-24-90 12:32					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
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															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid															
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline															
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol															
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline															
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline															
Acenaphthene															
2,4-Dinitrophenol															
4-Nitrophenol															
Dibenzofuran															

AFFECTED SAMPLES:

SBLK73	SBLK25	EJR26RE
ECQ65	EJR25RE	
ECQ66		
EJR24		
EJR24MS		
EJR24MSD		
EJR25		
EJR26		
ELR10		

Reviewer Initials/Date: AV 7-6-90

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE/SAS # 14327/5269E CONTRACTOR COMPUCHEM LABS.

Instrument # 05	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME: 6-19-90 12:07	6-13-90 12:07			6-19-9 14:00			6-23-90 13:58			6-24-90 12:32					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene		-													
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline															
4,6-Dinitro-2-Methylphenol															
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene															
Pentachlorophenol															
Phenanthrene															
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene															
Butylbenzylphthalate															
Benzo(a)Anthracene															
bis(2-Ethylhexyl)Phthalate															
Chrysene															
Di-n-Octyl Phthalate															
Benzo(b)Fluoranthene															
Benzo(k)Fluoranthene															
Benzo(a)Pyrene															
Indeno(1,2,3-cd)Pyrene															
Dibenz(a,h)Anthracene	.638			.770			.799	25.2	J	.890	39.5	J			
Benzo(g,h,i) Perylene															

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: AV 7-6-90

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DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result 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 but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} - 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

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 indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract shall be confirmed by GC/MS.

2

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - 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 Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

Table 4-__
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED _____ SAMPLES

7/18/90

Sample Collection Information and Parameters	Sample Number 1	2	3	4	5	6	7	8	9	10	11	12
			Dup			BLK						
Date	RW1	RW2		RW3	RW4							
Time												
Well Depth (Feet)												
CKL Log Number												
CLP Organic Traffic Report Number	EJR 24	25	26	ECQ 65	66	ELR 10						
CLP Inorganic Traffic Report Number												
Temperature (°C)												
Specific Conductivity (µmhos/cm)												
pH												

Physical State*	Waste Characteristics**	Category***	SI Memo	Compound Detected (values in µg/L or µg/kg)	1	2	3	4	5	6	7	8	9	10	11	12
				Volatile Organics												
Gas	A,D,G,I	OCC	HH	chloromethane												
Gas	A,D,G,I	OCC	HH	bromomethane												
Gas	A,D,G,I	OCC	HH	vinyl chloride												
Gas	A,D,G,I	OCC	HH	chloroethane												
Liquid	A,D,H,I	SOL	HH,CLA	methylene chloride												
Liquid	E,H,I,A	SOL	K,CLA	acetone						7 J						
Liquid	A,H,I	SOL	SH	carbon disulfide												
Liquid	A,D,G,I	SOL	HH	1,1-dichloroethene												
Liquid	A,D,H,G	SOL	HH	1,1-dichloroethane												
Liquid	A,D,G	SOL	HH	1,2-dichloroethene (total)												
Liquid	A,D	SOL	HH	chloroform						2 J						
Liquid	A,D,G	SOL	HH	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)												
Liquid	A,D	SOL	HH	1,1,1-trichloroethane				45 J								
Liquid	A,D	SOL	HH	carbon tetrachloride												
Liquid	A,D,G	SOL	HYD	vinyl acetate												
Liquid	A,D	OCC	HH	bromodichloromethane						1 J						
Liquid	A,D,G	SOL	HH	1,2-dichloropropane												
Liquid	A,D,G	SOL	HH	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	HH	trichloroethene												
Liquid	A,D	OCC	HH	dibromochloromethane												
Liquid	A,D	SOL	HH	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	HH	trans-1,3-dichloropropene												
Liquid	A,D	SOL	HH,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	HH	tetrachloroethene												
Liquid	A,G,E	SOL	A,CLA	toluene												
Liquid	A,D,E	SOL	HH	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	HA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene				2 J								
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)				5 J								

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number 1	2	3	4	5	6	7	8	9	10	11	12
				Semivolatile Organics												
S, thick 1	A,B,E	OCC	P	phenol												
Liquid	A,D,B	OCC	HH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,H	SOL	HA	1,3-dichlorobenzene												
Solid	A,D,H	OCC	HA	1,4-dichlorobenzene												
Liquid	A,D,H	SOL	A	benzyl alcohol												
Liquid	A,D,H	OCC	HA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
	A,D	OCC	HH	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	H-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	HH	hexachloroethane												
Liquid	A,D	OCC	NA	nitrobenzene												
Liquid	A,D	OCC	H	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	HH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	HA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene												
Solid	A,D	OCC	HH	4-chloroaniline												
Liquid	A,D,B	OCC	HH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene												
Liquid	A,D,B	OCC	HH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	NH	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	NA	2,6-dinitrotoluene												
Solid	A,D	OCC	NH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene												
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran												
Solid	A,D	OCC	NA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	HH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene												
Solid	A,D,E	OCC	NH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	NH	n-nitrosodiphenylamine												
Liquid	A,D	OCC	HH	4-bromophenyl-phenylether												
Solid	A,D	OCC	HA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene												

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number 1	2	3	4	5	6	7	8	9	10	11	12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene												
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate												
Solid	A,D	OCC	PAH	fluoranthene												
Solid	A,D	OCC	PAH	pyrene												
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	HA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene												
Solid	A,D	OCC	PAH	chrysene												
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate	1	27	B	5								
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo[b]fluoranthene												
Solid	A,D	OCC	PAH	benzo[k]fluoranthene												
Solid	A,D,K,L	OCC	PAH	benzo[a]pyrene												
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene												
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene												
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene												
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Mariate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

Organic Traffic Report
(For CLP Use Only)

Alexandria, VA 22313
703-557-2490 FTS 557-2490

Case Number	SAS No. (if applicable)
14327	5269 E

1. Sample Description *(Enter in Column A)*
   1. Surface Water
   2. Ground Water
   3. Leachate
   4. Rinsate
   5. Soil/Sediment
   6. Oil (SAS)
   7. Waste (SAS)
   8. Other (SAS) *(Specify)*

2. Region Number: V
Sampling Co.: F 29
Sampler (Name): DANIEL SULLIVAN

3. Ship To:
COMPU CHEM LABORATORIES
3308 CHAPEL HILL/NELSON HWY
P O BOX 12652
RTP NC 27709
ATTN: NATALIE CARTER

4. Date Shipped: 6 12 90
Airbill Number: 1060857243
Carrier: F

Triple volume required for matrix spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans.

See reverse for additional instructions.

5. Date Received: 6/13/90
Received by: V. Dath
Laboratory Contract Number: 5269 E
Unit Price: 700.00

6. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Number (From labels)	(A) Sample Description (From box 1)	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA	BNA	Pest/PCB	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number	(H) Sample Condition on Receipt	(I) High Conc. Phases (Check below) Solid	Water—MIS Liq.	Non Water—MIS Liq.
EJR 24	2	L	✓	✓	✓	MSD	RW1	6 12 90/1330	MEKN 94	346857			
EJR 25	2	L	✓	✓	✓		RW2	6 12 90/1250	MEKN 95	346858			
EJR 26	2	L	✓	✓	✓		DUP	6 12 90/1250	MEKN 96	346859			
ECQ 65	2	L	✓	✓	✓		RW3	6 12 90/1410	MEKN 97	346846			
ECQ 66	2	L	✓	✓	✓		RW4	6 12 90/1500	MEKN 98	346856			
~~EER 69~~	~~2~~	~~L~~					~~RW5~~	~~6 12 90/~~	~~MEKN 99~~	D.S			
EER 10	4	L	✓	✓	✓	BLANK	BLANK	6 12 90/1255	MELP 01	346860			

SHIPMENT IS COMPLETE

* ORGINAL TRAFFIC NOT CLEAR UNABLE TO MAKE CLEAR COPY * 6/13/90

RECEIVED IN GOOD CONDITION 6/13/90

EPA Form 9110-2 (9-88) Replaces EPA Form 2075-7, which may be used. Blue - SMO Copy Pink - Region Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

14327 ECQ65 SAMPLES DATA PACKAGE

COMPUCHEM LABORATORIES

EPA CASE NARRATIVE--SET# 14327
Contract# SAS5269E SDG# ECQ65
CompuChem Laboratories, Inc.

Sample Numbers: ECQ65, ECQ66, EJR24, EJR25, EJR26, ELR10

LDL COMMENTS:
1. CompuChem is following EPA rounding convention for CRQL and result reporting. Semivolatile and volatile fractions are being reported to one significant figure below ten.
2. The J values are being reported down to half of modified CRQL.
3. The word "NO" on quantitation report either means the com- pounds were not found or the compound results were less than 1/2 the CRQL.
4. The reporting units for the pesticide fractions are NG/L.

This portion of Set# 14268 consisted of 6 water samples for low detection limit volatile, semivolatile, and pesticide analysis. The samples were received intact via Federal Express on 6-13-90 in properly sealed shipping containers with traffic reports. The traffic report copy provided is of poor quality due to the condition of the original upon arrival.

VOLATILES:
All volatile fractions were analyzed within holding time requirements. TCL compounds present included methylene chloride, 1,1,1-trichloroethane, ethylbenzene, xylenes, acetone, chloroform, and bromodichloromethane. Acceptable levels of methylene chloride were present in each method blank. Sample ELR10 was designated as a blank, but contained methylene chloride, acetone, chloroform, and bromodichloromethane. The presence of these compounds was not attributable to sample carryover or laboratory contamination and were, therefore, considered to be actual sample constituents. A qualifying notice was included with the sample. Sample EJR25 contained a tentatively identified compound which was identified as instrument carryover from a previous analysis in the same tune period. This determination was made after holding time had expired. Target compounds that might elute in the same scan area as the carryover peak were manually searched for and were not detected. The extraneous peak was assessed as a laboratory artifact and the data were reported with a qualifying notice. All surrogate recovery criteria were met. The QC matrix spike/matrix spike duplicate results were acceptable.

SEMIVOLATILES:
All semivolatile fractions were initially extracted and analyzed within holding time requirements. Samples EJR25RE and EJR26RE required reextraction due to surrogate failures and could not be reextracted within holding time criteria. Bis(2-ethylhexyl)phthalate was present in some of the samples and also in one method blank. No other TCL compounds were present. One tentatively identified compound was present in sample EJR25RE. Two analyses each of samples EJR25 and

COMPUCHEM LABORATORIES

EJR26 were reported and billed due to a confirmed matrix effect that resulted in acid surrogate failures in two separate extractions. The 2-fluorophenol and D5-phenol surrogate recoveries failed in EJR25, EJR25RE, EJR26, and EJR26RE. The 2,4,6-tribromophenol recoveries failed in EJR25RE and EJR26RE. All other surrogate recovery criteria were met. The QC matrix spike/matrix spike duplicate results were acceptable.

PESTICIDES:
All pesticide fractions were extracted and analyzed within holding time requirements. None of the samples contained any reportable levels of TCL compounds. All surrogate recovery criteria were met. The QC matrix spike/matrix spike duplicate results were acceptable. The recovery of gamma-BHC in the MSD and its RPD value fell outside QC limits.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

NOTE: This report is paginated for reference and accountability in decreasing numerical sequence.

Janet G. Livingston 6-30-90

Janet G. Livingston 6-30-90
Sr. Quality Assurance Specialist

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	ECQ65	99	90	92		0
02	ECQ66	96	89	90		0
03	EJR24	94	96	95		0
04	EJR25	94	86	90		0
05	EJR26	104	94	97		0
06	ELR10	96	96	95		0
07	EJR24MS	100	90	90		0
08	EJR24MSD	108	95	94		0
09	VBLKGP	104	100	100		0
10	VBLKCM	99	96	99		0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA-1 1/87 Rev.

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	ECQ65	56	61	84	18	23	47		0
02	ECQ66	52	59	71	15	22	42		0
03	EJR24	61	68	80	22	32	55		0
04	EJR25	60	64	78	3 *	3 *	21		2
05	EJR25RE	46	50	63	0 *	0 *	4 *		3
06	EJR26	55	60	83	4 *	5 *	31		2
07	EJR26RE	58	58	81	0 *	0 *	0 *		3
08	ELR10	62	65	90	30	41	58		0
09	EJR24MS	65	70	81	20	28	48		0
10	EJR24MSD	61	65	75	20	28	46		0
11	SBLK73	68	68	86	34	47	58		0
12	SBLK25	56	62	73	27	39	42		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl	(33-141)
S4 (PHL)	= Phenol-d5	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	PBLK46	117	0
02	EJR24MS	96	0
03	EJR24MSD	82	0
04	ECQ65	111	0
05	ECQ66	110	0
06	EJR24	86	0
07	EJR25	112	0
08	EJR26	132	0
09	ELR10	95	0
10			
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29			
30			

ADVISORY QC LIMITS (24-154)

S1 (DBC) = Dibutylchlorendate

Column used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

FORM II PEST-1 1/87 Rev.

14327 ECQ65 SAMPLES DATA SUMMARY

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix Spike - EPA Sample No.: EJR24

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	12.5	0	13.9	111	61-145
Trichloroethene	12.5	0	13.4	107	71-120
Benzene	12.5	0	12.3	98	76-127
Toluene	12.5	0	12.9	103	76-125
Chlorobenzene	12.5	0	12.3	98	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	12.5	14.7	118	-6	14	61-145
Trichloroethene	12.5	13.7	110	-3	14	71-120
Benzene	12.5	12.1	97	1	11	76-127
Toluene	12.5	13.1	105	-2	13	76-125
Chlorobenzene	12.5	12.6	101	-3	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP ,14327,ECQ65,EJR24,LOW,WATER,346857,VOLATILE,EPA,
CAP, CT900620A18,BG900620A18, , , ,

FORM III VOA-1 1/87 Rev.

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix Spike - EPA Sample No.: EJR24

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	40.0	0	8.14	20	12- 86
2-Chlorophenol	40.0	0	17.3	43	27-123
1,4-Dichlorobenzene	20.0	0	11.8	59	36 97
N-Nitroso-di-n-prop.(1)	20.0	0	11.6	58	41 116
1,2,4-Trichlorobenzene	20.0	0	12.1	61	39 98
4-Chloro-3-methylphenol	40.0	0	14.1	35	23 97
Acenaphthene	20.0	0	14.6	73	46-118
4-Nitrophenol	40.0	0	9.60	24	10- 80
2,4-Dinitrotoluene	20.0	0	14.0	70	24- 96
Pentachlorophenol	40.0	0	6.40	16	9-103
Pyrene	20.0	0	16.5	83	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	40.0	7.94	20	0	42	12- 86
2-Chlorophenol	40.0	17.1	43	0	40	27-123
1,4-Dichlorobenzene	20.0	11.2	56	5	28	36 97
N-Nitroso-di-n-prop.(1)	20.0	10.9	55	5	38	41 116
1,2,4-Trichlorobenzene	20.0	11.0	55	10	28	39 98
4-Chloro-3-methylphenol	40.0	13.4	34	3	42	23 97
Acenaphthene	20.0	13.6	68	7	31	46-118
4-Nitrophenol	40.0	10.4	26	-8	50	10- 80
2,4-Dinitrotoluene	20.0	13.0	65	7	38	24- 96
Pentachlorophenol	40.0	6.18	15	6	50	9-103
Pyrene	20.0	15.3	77	8	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: CLP ,14327,ECQ65,EJR24,LOW,WATER,346857,PEST,EPA,
CAP, HG900619A05,DF900619A05, , , ,

3E
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix Spike - EPA Sample No.: EJR24

COMPOUND	SPIKE ADDED (ng/L)	SAMPLE CONCENTRATION (ng/L)	MS CONCENTRATION (ng/L)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	100.000	0.000	65.900	66	56-123
Heptachlor	100.000	0.000	63.000	63	40-131
Aldrin	100.000	0.000	63.300	63	40-120
Dieldrin	250.000	0.000	170.000	68	52-126
Endrin	250.000	0.000	210.000	84	56-121
4,4'-DDT	250.000	0.000	180.000	72	38-127

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	100.000	54.400	54 *	20 *	15	56-123
Heptachlor	100.000	60.200	60	5	20	40-131
Aldrin	100.000	61.800	62	2	22	40-120
Dieldrin	250.000	150.000	60	13	18	52-126
Endrin	250.000	180.000	72	15	21	56-121
4,4'-DDT	250.000	150.000	60	18	27	38-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 6 outside limits
Spike Recovery: 1 out of 12 outside limits

COMMENTS:

FORM III PEST-1 8/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Lab File ID: CB900620C18 Lab Sample ID: VBLKGP

Date Analyzed: 06/20/90 Time Analyzed: 0313

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 18

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EJR24MS	346847	CN046847C18	0702
02	EJR24MSD	346848	CN046848A18	0813

COMMENTS: CLP ,14327,ECQ65, ,LOW, ,000000,VOLATILE,BLANK,
CAP, CV900619C18,BG900619B18, , , ,

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Lab File ID: CB900620A18 Lab Sample ID: VBLKCM

Date Analyzed: 06/20/90 Time Analyzed: 1433

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 18

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ECQ65	346846	CN046846B18	2134
02	ECQ66	346856	CN046856B18	2040
03	EJR24	346857	CR046857B18	1852
04	EJR25	346858	CN046858B18	1640
05	EJR26	346859	CN046859B18	1946
06	ELR10	346860	CR046860B18	1746

COMMENTS: CLP ,14327,ECQ65, ,LOW, ,000000,VOLATILE,BLANK,
CAP, CT900620A18,BG900620A18, , , ,

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Lab File ID: GH047492A05 Lab Sample ID: SBLK73

Date Extracted: 06/15/90 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 06/19/90 Time Analyzed: 1509

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 05

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	ECQ65	346846	GH046846A05	06/19/90
02	ECQ66	346856	GH046856A05	06/19/90
03	EJR24	346857	GH046857A05	06/19/90
04	EJR25	346858	GH046858A05	06/19/90
05	EJR26	346859	GH046859A05	06/19/90
06	ELR10	346860	GH046860A05	06/19/90
07	EJR24MS	346850	GH046850A05	06/19/90
08	EJR24MSD	346851	GH046851A05	06/19/90

COMMENTS: CLP, , , ,LOW,WATER,347492,PEST,BLANK,
CAP, HG900619A05,DF900619A05, , , ,

FORM IV SV 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Lab File ID: GH048874A05 Lab Sample ID: SBLK25

Date Extracted: 06/20/90 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 06/23/90 Time Analyzed: 1452

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 05

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EJR25RE	346858	GR046858A05	06/23/90
02	EJR26RE	346859	GRJ46859A05	06/24/90

COMMENTS: CLP , , , ,LOW,WATER,348874,PEST,BLANK,
CAP, HG900623A05,DH900623A05, , , ,

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Lab Sample ID: 347491 Lab File ID: _____

Matrix:(soil/water) WATER Level:(low/med) LOW

Date Extracted: 06/15/90 Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed (1): 06/26/90 Date Analyzed (2): 06/29/90

Time Analyzed (1): 0305 Time Analyzed (2): 1147

Instrument ID (1): 03 Instrument ID (2): 01

GC Column ID (1): OV-101 GC Column ID (2): 2250/2401

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EJR24MS	346853	06/22/90	
02	EJR24MSD	346854	06/22/90	
03	ECQ65	346846	06/22/90	06/28/90
04	ECQ66	346856	06/26/90	
05	EJR24	346857	06/26/90	
06	EJR25	346858	06/23/90	06/28/90
07	EJR26	346859	06/26/90	
08	ELR10	346860	06/22/90	
09				
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COMMENTS: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKGP

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: VBLKGP

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CB900620C18

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 6.29.90

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	0.8	U
75-01-4	Vinyl Chloride	0.9	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	0.7	J
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	0.9	U
75-34-3	1,1-Dichloroethane	0.9	U
540-59-0	1,2-Dichloroethene (total)	0.9	U
67-66-3	Chloroform	0.9	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	4	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	2	U
108-10-1	4-Methyl-2-Pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	0.9	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	2	U
107-02-8	Acrolein	20	U
107-13-1	Acrylonitrile	26	U

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKGP

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: VBLKGP

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CB900620C18

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 6.29.90

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKCM

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: VBLKCM

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CB900620A18

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 6.29.90

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	0.8	U
75-01-4	Vinyl Chloride	0.9	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	0.9	U
75-34-3	1,1-Dichloroethane	0.9	U
540-59-0	1,2-Dichloroethene (total)	0.9	U
67-66-3	Chloroform	0.9	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	4	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	2	U
108-10-1	4-Methyl-2-Pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	0.9	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	2	U
107-02-8	Acrolein	20	U
107-13-1	Acrylonitrile	26	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKCM

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: VBLKCM

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CB900620A18

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 6.29.90

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK73

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: SBLK73

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH047492A05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK73

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: SBLK73

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH047492A05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1	U
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK73

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: SBLK73

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH047492A05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK25

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: SBLK25

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH048874A05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/20/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK25

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E , SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: SBLK25

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH048874A05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/20/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK25

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: SBLK25

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH048874A05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/20/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK46

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E ~~SDG~~ No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 347491

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/26/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: ~~0.10~~ 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	5.0	U
319-85-7	beta-BHC	5.0	U
319-86-8	delta-BHC	5.0	U
58-89-9	gamma-BHC (Lindane)	5.0	U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5.0	U
1024-57-3	Heptachlor epoxide	5.0	U
959-98-8	Endosulfan I	5.0	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	10.	U
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	10.	U
72-43-5	Methoxychlor	50.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	50.	U
5103-74-2	gamma-Chlordane	50.	U
8001-35-2	Toxaphene	100	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	50.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	100	U
11096-82-5	Aroclor-1260	100	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECQ65

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346846

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN046846B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 6-29-90

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	0.8	U
75-01-4	Vinyl Chloride	0.9	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	1	~~B~~ U
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	0.9	U
75-34-3	1,1-Dichloroethane	0.9	U
540-59-0	1,2-Dichloroethene (total)	0.9	U
67-66-3	Chloroform	0.9	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	4	U
71-55-6	1,1,1-Trichloroethane	45	
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	2	U
108-10-1	4-Methyl-2-Pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	0.9	U
100-41-4	Ethylbenzene	2	
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	5	
107-02-8	Acrolein	20	U
107-13-1	Acrylonitrile	26	U

AV 7-6-90

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECQ65

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346846

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN046846B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 10

6.29.90

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECQ66

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346856

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN046856B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 6.29.90

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	0.8	U
75-01-4	Vinyl Chloride	0.9	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	~~B~~ U
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	0.9	U
75-34-3	1,1-Dichloroethane	0.9	U
540-59-0	1,2-Dichloroethene (total)	0.9	U
67-66-3	Chloroform	0.9	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	4	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	2	U
108-10-1	4-Methyl-2-Pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	0.9	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	2	U
107-02-8	Acrolein	20	U
107-13-1	Acrylonitrile	26	U

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14327 ECQ65 SAMPLES DATA SUMMARY 82

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECQ66

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346856

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN046856B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0

6-29-90

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR24

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346857

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR046857B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 6.29.90

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	0.8	U
75-01-4	Vinyl Chloride	0.9	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	~~B~~ U
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	0.9	U
75-34-3	1,1-Dichloroethane	0.9	U
540-59-0	1,2-Dichloroethene (total)	0.9	U
67-66-3	Chloroform	0.9	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	4	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	2	U
108-10-1	4-Methyl-2-Pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	0.9	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	2	U
107-02-8	Acrolein	20	U
107-13-1	Acrylonitrile	26	U

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR24

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346857

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR046857B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 6-29-90

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR25

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346858

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN046858B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.88 6.25.90

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	0.8	U
75-01-4	Vinyl Chloride	0.9	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	~~B~~ V
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	0.9	U
75-34-3	1,1-Dichloroethane	0.9	U
540-59-0	1,2-Dichloroethene (total)	0.9	U
67-66-3	Chloroform	0.9	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	4	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	2	U
108-10-1	4-Methyl-2-Pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	0.9	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	2	U
107-02-8	Acrolein	20	U
107-13-1	Acrylonitrile	26	U

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR25

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346858

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN046858B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 ABS. 6.29.90

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	3.55	9.0	J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR26

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346859

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN046859B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column: (pack/cap) PACK Dilution Factor: ~~4.8~~ 1.0 6-29-90

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	0.8	U
75-01-4	Vinyl Chloride	0.9	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	~~B~~ U
67-64-1	Acetone	2	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	0.9	U
75-34-3	1,1-Dichloroethane	0.9	U
540-59-0	1,2-Dichloroethene (total)	0.9	U
67-66-3	Chloroform	0.9	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	4	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	2	U
108-10-1	4-Methyl-2-Pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	0.9	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	2	U
107-02-8	Acrolein	20	U
107-13-1	Acrylonitrile	26	U

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR26

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346859

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CN046859B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column (pack/cap) PACK Dilution Factor: ~~4.0~~ 10 6.29.90

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR10

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346860

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR046860B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column: (pack/cap) PACK Dilution Factor: ~~4.0~~ 1.0 BS 6.29.90

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	0.8	U
75-01-4	Vinyl Chloride	0.9	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	2	~~B~~ U
67-64-1	Acetone	7	
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	0.9	U
75-34-3	1,1-Dichloroethane	0.9	U
540-59-0	1,2-Dichloroethene (total)	0.9	U
67-66-3	Chloroform	2	
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	4	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	1	U
75-27-4	Bromodichloromethane	1	J
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	1	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	1	U
75-25-2	Bromoform	2	U
108-10-1	4-Methyl-2-Pentanone	1	U
591-78-6	2-Hexanone	1	U
127-18-4	Tetrachloroethene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	0.9	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	0.9	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	1	U
1330-20-7	Total Xylenes	2	U
107-02-8	Acrolein	20	U
107-13-1	Acrylonitrile	26	U

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR10

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346860

Sample wt/vol: 20.0 (g/mL) ML Lab File ID: CR046860B18

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ Date Analyzed: 06/20/90

Column (pack/cap) PACK Dilution Factor: ~~1.0~~ 10 6.29.90

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECQ65

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E , SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346846

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046846A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECQ65

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346846

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046846A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	5	
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

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14327 ECQ65 SAMPLES DATA SUMMARY

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECQ65

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E ; SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346846

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046846A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECQ66

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346856

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046856A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECQ66

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346856

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046856A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1	U
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ECQ66

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346856

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046856A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR24

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346857

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046857A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR24

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346857

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046857A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1	
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR24

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346857

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046857A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR25

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346858

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046858A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR25

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346858

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046858A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1	U
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR25

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346858

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046858A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR25RE

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346858

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GR046858A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/20/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR25RE

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346858

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GR046858A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/20/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	27	~~B~~ B
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

7/18/90

AV 7-6-90

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR25RE

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346858

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GR046858A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/20/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 4337-65-9	HEXANEDIOIC ACID, MONO(2-ETH	16.45	8.0	J

FORM I SV-TIC 1/87 Rev.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR26

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046859A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR26

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046859A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1	U
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR26

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046859A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR26RE

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GRJ46859A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/20/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/24/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

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1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR26RE

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GRJ46859A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/20/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/24/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	2	~~B~~ U
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

AV 7-6-90

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1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR26RE

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346859

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GRJ46859A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/20/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/24/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR10

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346860

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046860A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)Ether	2	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	2	U
100-51-6	Benzyl Alcohol	2	U
95-50-1	1,2-Dichlorobenzene	3	U
95-48-7	2-Methylphenol	1	U
39638-32-9	bis(2-Chloroisopropyl)Ether	3	U
106-44-5	4-Methylphenol	1	U
621-64-7	N-Nitroso-Di-n-Propylamine	2	U
67-72-1	Hexachloroethane	2	U
98-95-3	Nitrobenzene	3	U
78-59-1	Isophorone	3	U
88-75-5	2-Nitrophenol	2	U
105-67-9	2,4-Dimethylphenol	2	U
65-85-0	Benzoic Acid	20	U
111-91-1	bis(2-Chloroethoxy)Methane	3	U
120-83-2	2,4-Dichlorophenol	2	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
106-47-8	4-Chloroaniline	2	U
87-68-3	Hexachlorobutadiene	3	U
59-50-7	4-Chloro-3-Methylphenol	2	U
91-57-6	2-Methylnaphthalene	2	U
77-47-4	Hexachlorocyclopentadiene	2	U
88-06-2	2,4,6-Trichlorophenol	2	U
95-95-4	2,4,5-Trichlorophenol	2	U
91-58-7	2-Chloronaphthalene	2	U
88-74-4	2-Nitroaniline	1	U
131-11-3	Dimethyl Phthalate	2	U
208-96-8	Acenaphthylene	2	U
606-20-2	2,6-Dinitrotoluene	1	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR10

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346860

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046860A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	3	U
83-32-9	Acenaphthene	2	U
51-28-5	2,4-Dinitrophenol	15	U
100-02-7	4-Nitrophenol	2	U
132-64-9	Dibenzofuran	1	U
121-14-2	2,4-Dinitrotoluene	1	U
84-66-2	Diethylphthalate	1	U
7005-72-3	4-Chlorophenyl-phenylether	1	U
86-73-7	Fluorene	1	U
100-01-6	4-Nitroaniline	3	U
534-52-1	4,6-Dinitro-2-Methylphenol	15	U
86-30-6	N-Nitrosodiphenylamine (1)	2	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	2	U
85-01-8	Phenanthrene	1	U
120-12-7	Anthracene	3	U
84-74-2	Di-n-Butylphthalate	2	U
206-44-0	Fluoranthene	2	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	4	U
56-55-3	Benzo(a)Anthracene	2	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1	U
117-84-0	Di-n-Octyl Phthalate	2	U
205-99-2	Benzo(b)Fluoranthene	2	U
207-08-9	Benzo(k)Fluoranthene	2	U
50-32-8	Benzo(a)Pyrene	2	U
193-39-5	Indeno(1,2,3-cd)Pyrene	4	U
53-70-3	Dibenz(a,h)Anthracene	3	U
191-24-2	Benzo(g,h,i)Perylene	4	U

(1) - Cannot be separated from Diphenylamine

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1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR10

Lab Name: COMPUCHEM LABS Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346860

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH046860A05

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/19/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECQ65

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346846

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/22/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: ~~0.10~~ 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	5.0	U
319-85-7	beta-BHC	5.0	U
319-86-8	delta-BHC	5.0	U
58-89-9	gamma-BHC (Lindane)	5.0	U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5.0	U
1024-57-3	Heptachlor epoxide	5.0	U
959-98-8	Endosulfan I	5.0	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	10.	U
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	10.	U
72-43-5	Methoxychlor	50.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	50.	U
5103-74-2	gamma-Chlordane	50.	U
8001-35-2	Toxaphene	100	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	50.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	100	U
11096-82-5	Aroclor-1260	100	U

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ECQ66

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346856

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. dec. Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/26/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: ~~0.10~~ 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L	Q
319-84-6	alpha-BHC	5.0	U
319-85-7	beta-BHC	5.0	U
319-86-8	delta-BHC	5.0	U
58-89-9	gamma-BHC (Lindane)	5.0	U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5.0	U
1024-57-3	Heptachlor epoxide	5.0	U
959-98-8	Endosulfan I	5.0	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	10.	U
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	10.	U
72-43-5	Methoxychlor	50.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	50.	U
5103-74-2	gamma-Chlordane	50.	U
8001-35-2	Toxaphene	100	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	50.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	100	U
11096-82-5	Aroclor-1260	100	U

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR24

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346857

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/26/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: ~~0.10~~ 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L

CAS NO.	COMPOUND	NG/L	Q
319-84-6	alpha-BHC	5.0	U
319-85-7	beta-BHC	5.0	U
319-86-8	delta-BHC	5.0	U
58-89-9	gamma-BHC (Lindane)	5.0	U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5.0	U
1024-57-3	Heptachlor epoxide	5.0	U
959-98-8	Endosulfan I	5.0	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	10.	U
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	10.	U
72-43-5	Methoxychlor	50.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	50.	U
5103-74-2	gamma-Chlordane	50.	U
8001-35-2	Toxaphene	100	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	50.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	100	U
11096-82-5	Aroclor-1260	100	U

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR25

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: EC065

Matrix: (soil/water) WATER Lab Sample ID: 346858

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/23/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: ~~0.10~~ 1.0

JBZ 6/30/90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L	Q
319-84-6	alpha-BHC	5.0	U
319-85-7	beta-BHC	5.0	U
319-86-8	delta-BHC	5.0	U
58-89-9	gamma-BHC (Lindane)	5.0	U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5.0	U
1024-57-3	Heptachlor epoxide	5.0	U
959-98-8	Endosulfan I	5.0	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	10.	U
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	10.	U
72-43-5	Methoxychlor	50.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	50.	U
5103-74-2	gamma-Chlordane	50.	U
8001-35-2	Toxaphene	100	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	50.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	100	U
11096-82-5	Aroclor-1260	100	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR26

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346859

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/26/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: ~~0.10~~ 1.0

gbl 6/30/90

CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L

CAS NO.	COMPOUND		Q
319-84-6	alpha-BHC	5.0	U
319-85-7	beta-BHC	5.0	U
319-86-8	delta-BHC	5.0	U
58-89-9	gamma-BHC (Lindane)	5.0	U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5.0	U
1024-57-3	Heptachlor epoxide	5.0	U
959-98-8	Endosulfan I	5.0	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	10.	U
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	10.	U
72-43-5	Methoxychlor	50.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	50.	U
5103-74-2	gamma-Chlordane	50.	U
8001-35-2	Toxaphene	100	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	50.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	100	U
11096-82-5	Aroclor-1260	100	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR10

Lab Name: COMPUCHEM LABORATORIES Contract: SAS5269E

Lab Code: COMPU Case No.: 14327 SAS No.: 5269E SDG No.: ECQ65

Matrix: (soil/water) WATER Lab Sample ID: 346860

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 06/13/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/15/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/22/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: ~~0.10~~ 1.0

DDL 6/13/90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) NG/L	Q
319-84-6	alpha-BHC	5.0	U
319-85-7	beta-BHC	5.0	U
319-86-8	delta-BHC	5.0	U
58-89-9	gamma-BHC (Lindane)	5.0	U
76-44-8	Heptachlor	5.0	U
309-00-2	Aldrin	5.0	U
1024-57-3	Heptachlor epoxide	5.0	U
959-98-8	Endosulfan I	5.0	U
60-57-1	Dieldrin	10.	U
72-55-9	4,4'-DDE	10.	U
72-20-8	Endrin	10.	U
33213-65-9	Endosulfan II	10.	U
72-54-8	4,4'-DDD	10.	U
1031-07-8	Endosulfan sulfate	10.	U
50-29-3	4,4'-DDT	10.	U
72-43-5	Methoxychlor	50.	U
53494-70-5	Endrin ketone	10.	U
5103-71-9	alpha-Chlordane	50.	U
5103-74-2	gamma-Chlordane	50.	U
8001-35-2	Toxaphene	100	U
12674-11-2	Aroclor-1016	50.	U
11104-28-2	Aroclor-1221	50.	U
11141-16-5	Aroclor-1232	50.	U
53469-21-9	Aroclor-1242	50.	U
12672-29-6	Aroclor-1248	50.	U
11097-69-1	Aroclor-1254	100	U
11096-82-5	Aroclor-1260	100	U

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

CRL Receipt Date 6/28 FIT Receipt Date 7/13 Review Completed 7/16/90

TO: Barrett

FROM: Mary Gzyra

SUBJECT: Rooto Corp

PAN: MI1120SB (1 hour charged for review) Case # 14327/5269

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
#	Low Soil	#	Low Soil
	Low Water		Low Water
	Drinking Water	6	Drinking Water
	Other		Other

Project Data Status _____ Completed!!

✓ Incomplete, awaiting DW org; Soil org + inorg.

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

_____ Compounds were detected in sample(s); see enclosed sheet.

Book No. _____ Page No. _____ Date Sampled _____

0759:2

recycled paper

7/16/90

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	1 MERN 94	2 95	3 96	4 97	5 98	6 MELP 01	7	8	9	10	11	12
					Dup				Blk		Sample Number					
				Analyte Detected (values in mg/kg or µg/L)												
Solid	A,D	MES	csc/cwc	aluminum	143 J	116 J	143 J	155 J	160 J	124 J						
Solid	A,D	MES	HM	antimony												
Solid	A,D	MES	HM	arsenic			2.7 B	3.4 B	2.5 B							
Solid	A,D	MES	csc/cwc	barium	98.4	29.7 B	30.9	118	98.2							
Solid	A,D	MES	M	beryllium												
Solid	A,D	MES	HM	cadmium				0.42 B								
Solid	D	MES	csc/cwc	calcium	115000	45100	44000	119000	114000	86.9 B						
Solid	A,D	MES	HM	chromium												
Solid	A,D	MES	HM	cobalt	4.9 B	12.4	12.2		5.5 B							
Solid	A,D	MES	HM	copper	4.0 JB			7.5 JB	3.3 JB	43.8						
Solid	A,D	MES	HM,csc;cwc	iron	1950	5740	5660	2480	2130							
Solid	A,D	MES	HM	lead				3.7 J		2.1						
Solid	A,D	MES	csc/cwc	magnesium	37200	96100	97600	41300	37600	22.5 JB						
Solid	A,D	MES	HM	manganese	105	257	252	120	102							
Liquid	A,D	MES	HM	mercury												
Solid	A,D	MES	HM	nickel						13.5 JB						
Solid	D	MES	csc,cwc	potassium	1670 B	3990	3760	1650 B	1590 B							
Solid	A,D	MES	M	selenium												
Solid	A,D	MES	HM	silver												
Solid	D	MES	csc,cwc	sodium	29200	43100	43700	23400	14400 J	3200						
Solid	A,D	MES	HM	thallium												
Solid	A,D	MES	HM	vanadium												
Solid	A,D	MES	CWL,csc,HM	zinc	34.4 J	18.4 JB	50.5 J	285 J	10.3 JB	4.4 JB						
Solid	A	IOC	IOC	cyanide												

-- Not detected.

7/10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 7-12-90

SUBJECT: Review of Region V CLP Data
Received for Review on June 28, 1990

7/13/90

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

TO: Data User: FIT

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

SITE NAME: ROOTO CORPORATION (MI) SMO Case No. 14327SAS5269E

EPA Data Set No. _____ No. of Samples: 6 D.U./Activity Numbers 1

CRL No. _____

SMO Traffic No. MEKN94 - 98, MELPO1

CLP Laboratory: SWOK Hrs. Required for Review: 4.5 + ½ 7/11/90

Following are our findings.

See next page mz 7/6/90

( ) Data are acceptable for use.
(x) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

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

Below are the out of control audits for case 14327SAS5269 which contained 6 low level water samples analyzed for total metals and total cyanide.

Water Samples(MEKN94-98,MELP01)

ICP ANALYSES: The duplicate RPD's for Al(20.2%) and Ni(200%) were not flagged(*) by the lab. The duplicate differences did not exceed the SAS IDL. Sample data for Ni and all Al data are qualified below.

The following blanks indicated contamination and are estimated(J):
1. Cu(ICB[4.2 ug/l],CCB[4.9 ug/l]); Cu(MEKN94,97,98)
2. Al(CCB[38.4 ug/l]); Al(all sample data)
3. Ni(CCB[11.1 ug/l]); Ni(MELP01)
4. Mg(CCB[36.3 ug/l]); Mg(MELP01)
5. Zn(CCB[4.5 ug/l],ICB[4.5 ug/l]); Zn(MEKN95,98,MELP01 are affected but are qualified below)

The reviewer corrected form 10 for the SAS IDL's.

GFAA ANALYSES: Pb data are qualified below.
The reviewer removed "B" flags from MELP01 and MEKN97.

OTHER QUALIFIERS: MELP01 is a field blank which indicated contamination on the following:
1. Al(124 ug/l); all data are affected but remain qualified as previously stated
2. Cu(43.8 ug/l); MEKN94,97,98 are affected but remain qualified as previously stated
3. Pb(2.1 ug/l); MEKN97 is estimated(J)
4. Na(3200 ug/l); MEKN98 is estimated(J)

MEKN95/96 are field duplicates and Zn(93%) indicated poor precision.
For Zn: MEKN95,98 MELP01 are estimated(J) due to poor precision and contamination; the rest of the Zn data are estimated(J) due to poor precision.

All CN and Hg data are acceptable.

Date: 7/6/90 M. [illegible]

DPO: [ ] ACTION [ ] FYI Region 5

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 14327 SAS52GE LABORATORY SWOK

SDG NO. MEKN94 DATA USER F.T

SOW 7/88 REVIEW COMPLETION DATE 7/12/90

NO. OF SAMPLES 6 WATER ____ SOIL ____ OTHER

REVIEWER [ ] ESD [X] ESAT [ ] OTHER, CONTRACT/CONTRACTOR ____

	ICP	AA	Hg	CYANIDE
1. HOLDING TIMES	O	O	O	O
2. INITIAL CALIBRATIONS				
3. CONTINUING CALIBRATIONS	O	O		
4. FIELD BLANKS ("F" = not applicable)	M	M		
5. LABORATORY BLANKS	M	O		
6. ICS	O			
7. LCS				
8. DUPLICATE ANALYSIS				
9. MATRIX SPIKE				
10. MSA				
11. SERIAL DILUTION				
12. SAMPLE VERIFICATION				
13. REGIONAL QC ("F" = not applicable)	X	O		
14. OVERALL ASSESSMENT	M	M	O	O

O = No problems or minor problems that do not affect data usability.
X = No more than *about* 5% of the data points are qualified as either estimated or unusable.
M = More than *about* 5% of the data points are qualified as estimated.
Z = More than *about* 5% of the data points are qualified as unusable.

DPO ACTION ITEMS: ____

AREAS OF CONCERN: ____

QC EXCEPTION SUMMARY REPORT

CASE # 714327SAS52AGE SITE Rod D Corporation MATRIX: Water WATER SAMPLE SPK. _____
DATA SET # _____ LAB _____ CONC. : Low WATER SAMPLE DUP. _____
LAB Q.C.# _____ REVIEWED BY _____ MATRIX: _____ SOIL SAMPLE SPK. _____
DATE: 7-11-90 CONC. : _____ SOIL SAMPLE DUP. _____

	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC			REGIONAL QC			OTHER/ COMMENTS
	Holding Time	Cal Blanks	Blnk Contam	Contam Contam	Prep Blk AQ	Prep Blk SOL	ICS Tst	LCS % AQ	LCS % SOL	Sol Dup RPD	Sol Spk Tst	AQ Dup RPD	AQ Spk Tst	Sol Dilu AQ	Sol Dilu SOL	GFAA Dup	GFAA Spike	Blank	Dup RPD	Spike Tst	Blnd Blank	Blnd Spike Tst	Spike Sample RPD	
Aluminum		3.1															7/11/90	3.1	4					
Antimony																								
Arsenic																								
Barium																								
Beryllium																								
Cadmium																								
Calcium																								
Chromium																								
Cobalt																								
Copper		4.9															7/11/90	4.8	4.8					
Iron																								
Lead																		2.1						
Magnesium		36.3																						
Manganese																								
Mercury																								
Nickel		11.1																						
Potassium																								
Selenium																								
Silver																								
Sodium																		3200						
Thallium																								
Tin																								
Vanadium																								
Zinc		4.5																	93					
Cyanide																								

U. S. EPA - CLP
COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

SOW No.: 7/88

EPA Sample No.	Lab Sample ID
MEKN94	281101
MEKN94D	281101D
MEKN95	281102
MEKN95S	281102S
MEKN96	281103
MEKN96D	281103D
MEKN97	281104
MEKN97S	281104S
MEKN98	281105
MELP01	281106

RECEIVED
JUN 28 1990
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES
If yes, were raw data generated before application of background corrections? Yes/No NO

Comments:
Both instruments, PE5100A and PE5100B, show a difference between the run log data and the computer printout is due to the fact that the analyst carries the numbers out further than the printout.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Signature: Jason D. Ruckman Name: Jason D. Ruckman

Date: June 27, 1990 Title: Inorganic Program Assistant Manager

U.S. EPA - CLP

EPA SAMPLE NO. 002

1

INORGANIC ANALYSIS DATA SHEET

MEKN94

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix (soil/water): WATER Lab Sample ID: 281101

Level (low/med): LOW Date Received: 6/13/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	143.00			P
7440-36-0	Antimony	3.00	U	S	F
7440-38-2	Arsenic	2.00	U	S	F
7440-39-3	Barium	98.40			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	.30	U	S	F
7440-70-2	Calcium	115000.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.90	B		P
7440-50-8	Copper	4.00	B		P
7439-89-6	Iron	1950.00			P
7439-92-1	Lead	2.00	U	S	F
7439-95-4	Magnesium	37200.00			P
7439-96-5	Manganese	105.00			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	11.00	U		P
7440-09-7	Potassium	1670.00	B		P
7782-49-2	Selenium	2.00	U	S	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	29200.00			P
7440-28-0	Thallium	2.00	U	S	F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	34.40			P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO. 003

1

INORGANIC ANALYSIS DATA SHEET

MEKN95

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix (soil/water): WATER Lab Sample ID: 281102

Level (low/med): LOW Date Received: 6/13/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	116.00			P
7440-36-0	Antimony	3.00	U	S	F
7440-38-2	Arsenic	2.00	U	S	F
7440-39-3	Barium	29.70	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	.30	U	S	F
7440-70-2	Calcium	45100.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	12.40			P
7440-50-8	Copper	3.00	U		P
7439-89-6	Iron	5740.00			P
7439-92-1	Lead	2.00	U	S	F
7439-95-4	Magnesium	96100.00			P
7439-96-5	Manganese	257.00			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	11.00	U		P
7440-09-7	Potassium	3990.00			P
7782-49-2	Selenium	2.00	U	S	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	43100.00			P
7440-28-0	Thallium	2.00	U	S	F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	18.40	B		P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

004

1

INORGANIC ANALYSIS DATA SHEET

MEKN96

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix (soil/water): WATER Lab Sample ID: 281103

Level (low/med): LOW Date Received: 6/13/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	143.00			P
7440-36-0	Antimony	3.00	U	S	F
7440-38-2	Arsenic	2.72	B	S	F
7440-39-3	Barium	30.90	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	.30	U	S	F
7440-70-2	Calcium	44000.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	12.20			P
7440-50-8	Copper	3.00	U		P
7439-89-6	Iron	5660.00			P
7439-92-1	Lead	2.00	U	S	F
7439-95-4	Magnesium	97600.00			P
7439-96-5	Manganese	252.00			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	11.00	U		P
7440-09-7	Potassium	3760.00			P
7782-49-2	Selenium	2.00	U	S	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	43700.00			P
7440-28-0	Thallium	2.00	U	S	F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	50.50			P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO. 005

1

INORGANIC ANALYSIS DATA SHEET

MEKN97

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix (soil/water): WATER Lab Sample ID: 281104

Level (low/med): LOW Date Received: 6/13/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	155.00			P
7440-36-0	Antimony	3.00	U	S	F
7440-38-2	Arsenic	3.36	B	S	F
7440-39-3	Barium	118.00			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	.42	B	S	F
7440-70-2	Calcium	119000.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.50	B		P
7439-89-6	Iron	2480.00			P
7439-92-1	Lead	3.69	~~B~~	S	F
7439-95-4	Magnesium	41300.00			P
7439-96-5	Manganese	120.00			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	11.00	U		P
7440-09-7	Potassium	1650.00	B		P
7782-49-2	Selenium	2.00	U	S	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	23400.00			P
7440-28-0	Thallium	2.00	U	S	F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	285.00			P
	Cyanide	10.00	U		C

mF 7/12/90

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

006

1

INORGANIC ANALYSIS DATA SHEET

MEKN98

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix (soil/water): WATER Lab Sample ID: 281105

Level (low/med): LOW Date Received: 6/13/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	160.00			P
7440-36-0	Antimony	3.00	U	S	F
7440-38-2	Arsenic	2.53	B	S	F
7440-39-3	Barium	98.20			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	.30	U	S	F
7440-70-2	Calcium	114000.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	5.50	B		P
7440-50-8	Copper	3.30	B		P
7439-89-6	Iron	2130.00			P
7439-92-1	Lead	2.00	U	S	F
7439-95-4	Magnesium	37600.00			P
7439-96-5	Manganese	102.00			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	11.00	U		P
7440-09-7	Potassium	1590.00	B		P
7782-49-2	Selenium	2.00	U	S	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	14400.00			P
7440-28-0	Thallium	2.00	U	S	F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	10.30	B		P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO. 007

1

INORGANIC ANALYSIS DATA SHEET

MELP01

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix (soil/water): WATER Lab Sample ID: 281106

Level (low/med): LOW Date Received: 6/13/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	124.00			P
7440-36-0	Antimony	3.00	U	S	F
7440-38-2	Arsenic	2.00	U	S	F
7440-39-3	Barium	4.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	.30	U	S	F
7440-70-2	Calcium	86.90	B		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	43.80			P
7439-89-6	Iron	10.00	U		P
7439-92-1	Lead	2.10	B	S	F
7439-95-4	Magnesium	22.50	B		P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	13.50	B		P
7440-09-7	Potassium	352.00	U		P
7782-49-2	Selenium	2.00	U	S	F
7440-22-4	Silver	2.00	U		P
7440-23-5	Sodium	3200.00			P
7440-28-0	Thallium	2.00	U	S	F
7440-62-2	Vanadium	3.00	U		P
7440-66-6	Zinc	4.40	B		P
	Cyanide	10.00	U		C

mF 7/12/90

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

3
BLANKS

Lab name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	18.0	U	26.4	B	38.4	B	29.8	B	18.000	U	P
Antimony	3.0	U	3.0	U	3.0	U					F
Arsenic	2.0	U	2.0	U	2.0	U					F
Barium	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.000	U	P
Cadmium	.3	U	.3	U	.3	U					F
Calcium	37.0	U	37.0	U	37.0	U	37.0	U	37.000	U	P
Chromium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Cobalt	4.0	U	4.0	U	4.0	U	4.0	U	4.000	U	P
Copper	4.2	B	4.9	B	3.1	B	4.2	B	3.000	U	P
Iron	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	P
Lead	2.0	U	2.0	U	2.0	U					F
Magnesium	22.0	U	36.3	B	22.0	U	30.9	B	22.000	U	P
Manganese	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Mercury	.2	U	.2	U	.2	U	.2	U	.200	U	CV
Nickel	11.0	U	11.1	B	11.0	U	11.0	U	11.000	U	P
Potassium	352.0	U	-358.4	B	352.0	U	352.0	U	352.000	U	P
Selenium	2.0	U	2.0	U	2.0	U					F
Silver	2.0	U	2.0	U	2.0	U	2.0	U	2.000	U	P
Sodium	119.0	U	119.0	U	119.0	U	119.0	U	341.000	B	P
Thallium	2.0	U	2.0	U	2.0	U	2.0	U			F
Vanadium	3.0	U	3.0	U	3.0	U	3.0	U	3.000	U	P
Zinc	4.5	B	4.5	B	4.0	U	4.0	U	4.500	B	P
Cyanide	10.0	U	10.0	U	10.0	U			10.000	U	C

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEKN95S

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide	80-120	97.9000		10.0000	U	100.00	97.9		C

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEKN97S

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix: WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	85-115	2223.0034		154.8152		2000.00	103.4		P
Antimony									NR
Arsenic									NR
Barium	85-115	2133.9285		117.5949		2000.00	100.8		P
Beryllium	85-115	50.9913		1.0000	U	50.00	102.0		P
Cadmium									NR
Calcium	85-115	163125.0100		119232.6700		50000.00	87.8		P
Chromium	85-115	215.8140		3.0000	U	200.00	107.9		P
Cobalt	85-115	494.1516		4.0000	U	500.00	98.8		P
Copper	85-115	255.7208		7.5294	B	250.00	99.3		P
Iron	85-115	3502.8779		2475.1582		1000.00	102.8		P
Lead									NR
Magnesium	85-115	64344.4100		41282.1320		25000.00	92.2		P
Manganese	85-115	322.2768		119.7656		200.00	101.3		P
Mercury	80-120	.9500		.2000	U	1.00	95.0		CV
Nickel	85-115	409.3846		11.0000	U	400.00	102.3		P
Potassium	85-115	21117.9250		1650.6993	B	20000.00	97.3		P
Selenium									NR
Silver	85-115	43.3150		2.0000	U	50.00	86.6		P
Sodium	85-115	71398.0000		23379.9410		50000.00	96.0		P
Thallium									NR
Vanadium	85-115	496.3575		3.0000	U	500.00	99.3		P
Zinc	85-115	488.3233		285.2294		200.00	101.5		P
Cyanide									NR

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEKN94D

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix (water/soil): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	%RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead								
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide		10.0000	U	10.0000	U			C

FORM VI - IN

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U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

MEKN96D

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

Matrix (water/soil): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	%RPD	Q	M
Aluminum	100.0	142.8579		116.6358		20.2		P
Antimony		3.0000	U	3.0000	U			F
Arsenic		2.7200	B	2.5200	B			F
Barium		30.8812	B	31.6643	B	2.5		P
Beryllium		1.0000	U	1.0000	U			P
Cadmium		.3000	U	.3000	U			F
Calcium		44004.3630		44399.7180		.9		P
Chromium		3.0000	U	3.0000	U			P
Cobalt		12.1536	B	11.2328	B	7.9		P
Copper	10.0	3.0000		3.0000		0.0		P
Iron		5655.8262		5712.4717		1.0		P
Lead		2.0000	U	2.0000	U			F
Magnesium		97560.3750		98809.2650		1.3		P
Manganese		252.0506		254.7646		1.1		P
Mercury		.2000	U	.2000	U			CV
Nickel		11.0000	U	14.7666	B	200.0		P
Potassium	2000.0	3763.1812		3580.5356		5.0		P
Selenium		2.0000	U	2.0000	U			F
Silver		2.0000	U	2.0000	U			P
Sodium		43690.9250		43908.9210		.5		P
Thallium		2.0000	U	2.0000	U			F
Vanadium		3.0000	U	3.0000	U			P
Zinc	20.0	50.5425		48.3186		4.5		P
Cyanide								

U.S. EPA - CLP

10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

ICP ID Number: TJA61 Date: 4/11/90

Flame AA ID Number: BUCK

Furnace AA ID Number:

All corrections MF 7/6/90

Analyte	Wave-length (nm)	Back ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		100 ~~200~~	18.0	P
Antimony			5 ~~60~~		
Arsenic			5 ~~10~~		
Barium	493.41		50 ~~200~~	4.0	P
Beryllium	313.04		5	1.0	P
Cadmium			.5 ~~5~~		
Calcium	317.93		1000 ~~5000~~	37.0	P
Chromium	267.72		10	3.0	P
Cobalt	228.62		10 ~~50~~	4.0	P
Copper	324.75		10 ~~25~~	3.0	P
Iron	259.94		100	10.0	P
Lead			2 ~~3~~		
Magnesium	279.08		1000 ~~5000~~	22.0	P
Manganese	257.61		10 ~~15~~	2.0	P
Mercury	253.70		0.2	.2	CV
Nickel	221.60		20 ~~40~~	11.0	P
Potassium	766.49		2000 ~~5000~~	352.0	P
Selenium			2 ~~5~~		
Silver	328.07		5 ~~10~~	2.0	P
Sodium	588.99		1000 ~~5000~~	119.0	P
Thallium			2 ~~10~~		
Vanadium	292.40		10 ~~50~~	3.0	P
Zinc	213.86		20	4.0	P

Comments:

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

ICP ID Number: Date: 4/10/90

Flame AA ID Number:

Furnace AA ID Number: TJA22

all corrections MF 7/6/90

Analyte	Wave-length (nm)	Back ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			100 ~~200~~		
Antimony			5 ~~60~~		
Arsenic			5 ~~10~~		
Barium			50 ~~200~~		
Beryllium			5		
Cadmium	228.80	BS	.5 ~~5~~	.3	F
Calcium			1000 ~~5000~~		
Chromium			10		
Cobalt			10 ~~50~~		
Copper			10 ~~25~~		
Iron			100		
Lead	283.30	BS	2 ~~3~~	2.0	F
Magnesium			1000 ~~5000~~		
Manganese			10 ~~15~~		
Mercury			0.2		
Nickel			20 ~~40~~		
Potassium			2000 ~~5000~~		
Selenium			2 ~~5~~		
Silver			5 ~~10~~		
Sodium			1000 ~~5000~~		
Thallium			2 ~~10~~		
Vanadium			10 ~~50~~		
Zinc			20		

Comments:

U.S. EPA - CLP

028

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

ICP ID Number: Date: 3/30/90

Flame AA ID Number:

Furnace AA ID Number: PE5100A

all corrections MF 7/6/90

Analyte	Wave-length (nm)	Back ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			100 ~~200~~		
Antimony	217.60	BZ	5 ~~60~~	3.0	F
Arsenic			5 ~~10~~		
Barium			50 ~~200~~		
Beryllium			5		
Cadmium			.5 ~~5~~		
Calcium			1000 ~~5000~~		
Chromium			10		
Cobalt			10 ~~50~~		
Copper			10 ~~25~~		
Iron			100		
Lead			2 ~~3~~		
Magnesium			1000 ~~5000~~		
Manganese			10 ~~15~~		
Mercury			0.2		
Nickel			20 ~~40~~		
Potassium			2000 ~~5000~~		
Selenium	196.00	BZ	2 ~~5~~	2.0	F
Silver			5 ~~10~~		
Sodium			1000 ~~5000~~		
Thallium			2 ~~10~~		
Vanadium			10 ~~50~~		
Zinc			20		

Comments:

U.S. EPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D9-0089

Lab Code: SWOK Case No.: 14327 SAS No.: 5269-E SDG No.: MEKN94

ICP ID Number: Date: 5/02/90

Flame AA ID Number:

Furnace AA ID Number: PE5100B

All corrections 7/6/90 MP

Analyte	Wave-length (nm)	Back ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			100 ~~200~~		
Antimony			5 ~~60~~		
Arsenic	193.70	BZ	5 ~~10~~	2.0	F
Barium			50 ~~200~~		
Beryllium			5		
Cadmium			.5 ~~5~~		
Calcium			1000 ~~5000~~		
Chromium			10		
Cobalt			10 ~~50~~		
Copper			10 ~~25~~		
Iron			100		
Lead			2 ~~3~~		
Magnesium			1000 ~~5000~~		
Manganese			10 ~~15~~		
Mercury			0.2		
Nickel			20 ~~40~~		
Potassium			2000 ~~5000~~		
Selenium			2 ~~5~~		
Silver			5 ~~10~~		
Sodium			1000 ~~5000~~		
Thallium	176.80	BZ	2 ~~10~~	2.0	F
Vanadium			10 ~~50~~		
Zinc			20		

Comments:

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW1-MSD

SAMPLING DATE 6/26/90 SAMPLING TIME 1445

ORGANIC TRAFFIC NUMBER ELR94

INORGANIC TRAFFIC NUMBER MELD89

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080400	0053013
1l plastic	CN	080401	0053013
80oz glass (4)	ABN/pest/PCB	080402,03,06,07	A9135024
40ml glass (6)	VOA	080404,05,08-11	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: greyish tan water

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.83

CONDUCTIVITY 625 µmho

TEMPERATURE 25°C

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / FOS-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW2

SAMPLING DATE 6/26/90 SAMPLING TIME 1600

ORGANIC TRAFFIC NUMBER ELR95

INORGANIC TRAFFIC NUMBER MELD90

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080412	0053013
1l plastic	CN	080413	0053013
8oz glass (2)	ABN/pest/PCB	080414,15	A9125044
40ml glass (2)	VOA	080416,17	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: light grey water

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.67

CONDUCTIVITY 850 µmho

TEMPERATURE 23°C

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW3

SAMPLING DATE 6/26/90 SAMPLING TIME 1700

ORGANIC TRAFFIC NUMBER ELR96

INORGANIC TRAFFIC NUMBER MELD91

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080418	0053013
1l plastic	CN	080419	0053013
8oz glass (2)	ABN/pest/PCB	080420,21	A9135024
40ml glass (2)	VOA	080422,23	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: light brown

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.84

CONDUCTIVITY 430 µmho

TEMPERATURE 23°C

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW-BLK

SAMPLING DATE 6/26/90 SAMPLING TIME 1630

ORGANIC TRAFFIC NUMBER ELR 97

INORGANIC TRAFFIC NUMBER MELD 92

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080424	0053013
1l plastic	CN	080425	0053013
80oz glass (2)	ABN/pest/PCB	080426,27	A 9125044
40ml glass (2)	VOA	080428,29	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 5.97

CONDUCTIVITY 1 µmho

TEMPERATURE 30°C

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION DUP (MW2)

SAMPLING DATE 6/26/90 SAMPLING TIME 1600

ORGANIC TRAFFIC NUMBER ELQ98

INORGANIC TRAFFIC NUMBER MELD93

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080430	0053013
1l plastic	CN	080431	0053013
8oz glass (2)	ABN/pest/PCB	080432,33	
40ml glass (2)	VOA	080434,35	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: light grey

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.67

CONDUCTIVITY 850 µmhos

TEMPERATURE 23°C

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW4

SAMPLING DATE 6/26/90 SAMPLING TIME 1730

ORGANIC TRAFFIC NUMBER ELQ99

INORGANIC TRAFFIC NUMBER MELD94

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080436	0053013
1l plastic	CN	080437	0053013
8oz glass (2)	ABN/pest/PCB	0804 38, 39	00115013
40ml glass (2)	VOA	0804 40, 41	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: light brown

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT:

when NaOH preservative was added to the CN sample a white precipitate formed

INSTRUMENT READINGS

pH 6.72

CONDUCTIVITY 1100

TEMPERATURE 20°C

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S1

SAMPLING DATE 6/26/90 SAMPLING TIME 1140

ORGANIC TRAFFIC NUMBER ELQ92

INORGANIC TRAFFIC NUMBER MELD82

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186068	0075023
8oz	ABN/Pest/PCB	186069	0135033
120ml (2)	VOA	186070,71	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown & tan sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS 8-10ppm organic vapors (above background)

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S2

SAMPLING DATE 6/26/90 SAMPLING TIME 1210

ORGANIC TRAFFIC NUMBER ELQ93

INORGANIC TRAFFIC NUMBER MELD83

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186072	0075023
8oz	ABN/Pest/PCB	186073	0135033
120ml (2)	VOA	186074,75	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S3

SAMPLING DATE 6/26/90 SAMPLING TIME 1345

ORGANIC TRAFFIC NUMBER ELQ94

INORGANIC TRAFFIC NUMBER MELD84

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186076	0075023
8oz	ABN/Pest/PCB	186077	0135033
120ml (2)	VOA	186078, 79	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S4

SAMPLING DATE 6/26/90 SAMPLING TIME 1505

ORGANIC TRAFFIC NUMBER ELQ95

INORGANIC TRAFFIC NUMBER MELD85

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186080	0075023
8oz	ABN/Pest/PCB	186081	0135033
120ml (2)	VOA	186082,83	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S5

SAMPLING DATE 6/26/90 SAMPLING TIME 1610

ORGANIC TRAFFIC NUMBER ELQ96

INORGANIC TRAFFIC NUMBER MELD86

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186084	0075023
8oz	ABN/Pest/PCB	186085	0135033
120ml (2)	VOA	186086,87	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S6

SAMPLING DATE 6/26/90 SAMPLING TIME 1645

ORGANIC TRAFFIC NUMBER ELQ97

INORGANIC TRAFFIC NUMBER MELD87

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186088	0075023
8oz	ABN/Pest/PCB	186089	0135033
120ml (2)	VOA	186090,91	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

SAMPLER CHECKLIST

ALL LOW CONCENTRATION SAMPLES

Site Name Texaco, Inc

All the below procedures have been followed and all coolers properly packaged for shipment.

Sampler Signature

Team Leader Signature

X 1. Is **date shipped** filled in on the **OTR/ITR?**

X 2. Is **date** and **time** of sample collection **(Letter "F)** filled in on the **OTR/ITR?**

X 3. Has either **Shipment Complete** or **Shipment Not Complete** been marked on the OTR/ITR?

X 4. On the C.O.C. form, is PAN in **project no.**; TDD/Case/SAS (if applicable) in **project name** for CLP and site name/case for CRL?

X 5. Are all **dates** and **times** on the **C.O.C.** form?

X 6. Has either **grab** or **composite** sample been marked on the C.O.C.?

X 7. Is the **matrix** filled out on each line of the **C.O.C.** form? (i.e., Soil, Water, Drinking Water) DO NOT USE ARROWS.

X 8. Is the **Cooler #** written on top of the **C.O.C.** form?

X 9. Is it referenced on the C.O.C.s which cooler # the OTR/ITR or the CRL tracking forms are in?

X 10. Are **relinquish date, time,** and **signature** on the bottom of the **C.O.C.?**

X 11. Is there one C.O.C. per cooler?

X 12. Has the proper **paperwork** been put in a plastic bag and taped to the inside of the **cooler lid?**

- o C.O.C. - Send white copy, bring back pink and yellow.
- o OTR/ITR - Send white and yellow copies and bring back blue/green and pink.
- o CRL tracking forms - send all of them.

SA002(04/18/90)

X 13. Is **sample number**, **date**, and **time** of collection permanently labeled on each sample bottle?

X 14. Are samples **packaged** in such a way to prevent breakage?

X 15. Have **photographs** been taken of each **cooler** showing ice, custody seals, and paperwork?

X 16. Are the **coolers acceptable** at Fed Ex?

- o Condition
- o Drain plug taped
- o Correctly labeled with address stickers

X 17. Are you sending the coolers to the correct lab? Are you using the correct lab acronym?

X 18. Did you **call** the **SMC** before 10:00 a.m. on the day after the sample shipment?

ONLY APPLIES TO WATERS

X 1. On the OTR/ITR forms, is the Sample **Blank** marked **rinsate (4)** in sample description (Letter "A").

X 2. For **monitoring wells**, has it been stated on the bottom of the inorganic C.O.C. whether the **metals were filtered or not?**

X 3. On the OTR/ITR forms, **"blank"** should be **written** under special handling (Letter "D") and on OTR, MSD should be marked in the same location.

X 4. Have the **preservatives** been written on the C.O.C. next to the bottle volume?

HNO_3 for Metals	$K_2Cr_2O_7$, $+HNO_3$ for Hg
NaOH for CN	HCL for VOA

X 5. Are sample **water levels** marked with a grease pencil on all **sample bottles** except for VOA?

Texaco Inc. / Phillips

#14427

① The tag numbers for your organic soils are transposed. They should be 186 instead of 168.

Please submit a typewritten memo for #1 ☺

Thanks,
Cathy

FIT SAMPLE PROPOSAL FORM REGION V

DATE FORM COMPLETED 5-15-90 PAN# FIL0602SA TDD# F05-8903-010 EPA I.D.# ILD042844456

SITE NAME (PRINT) TEXACO INC. SALES TERM 33083 CITY EAST PEORIA STATE ILLINOIS

TEAM LEADER D. SULLIVAN SAMPLER BARRETT DATE SENT TO RSCC

CASE # 14427 DRINKING WATER SAS # ORGANIC INORGANIC

ROUTINE ANALYTICAL SERVICES (RAS)

LOW WATERS FRACTION	MONITORING WELLS NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs	5 + 1 + 1 = 5		Compuchem	2	6	7375419833	6/26
PEST/PCB			WEYER	1		7375419822	
METALS							
CN							

LOW WATERS FRACTION	SURFACE WATERS NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB							
METALS							
CN							

LOW SOILS/SEDIMENTS/SLUDGES FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB	6 6	~~6-14-90~~	Compuchem	1	6	7375419833	6/26
METALS		6-25-90	WEYER	1		7375419822	
CN							

RESIDENTIAL/ MUNICIPAL WELL WATERS (DRINKING WATER SAMPLES)

✓ Complete

LOW DETECTION LIMITS/FAST TURN AROUND FRACTION	NUMBER OF FIELD SAMPLES+ BLANKS+ DUPLICATE= TOTAL	EXPECTED DATE TO SAMPLE	LABORATORY NAME	NUMBER OF COOLERS SHIPPED	NUMBER OF SAMPLES SHIPPED	AIR BILL NUMBERS	DATE SHIPPED TO LAB
VOA							
ABNs							
PEST/PCB							
METALS							
CN							

| SEE NEXT PAGE FOR SPECIAL ANALYTICAL SERVICE REQUEST FOR THIS SITE

SAS #

Late Request
Confirmed 6/22/90
P.M.

RECEIPT FOR SAMPLES

U.S. EPA, 230 S. Dearborn St., Chicago, IL 60604

U. S. EPA ID NO ILD042844456

PROJ. ACCT. NO. FIL0602SA

TDD F05-8903-010

SPLIT SAMPLES ACCEPTED(✓) DECLINED( )

FACILITY/OCCUPANT NAME: CATERPILLAR, INC.

FACILITY/OCCUPANT ADDRESS: 1253 W. WASHINGTON, EAST PEORIA, IL

SAMPLE NUMBER	DATE	TIME	SPLIT SAMPLES (✓)	OTR#	ITR#	DESCRIPTION OF SAMPLE LOCATIONS	SEMIVOLATILES	PESTICIDES/PCBS	VOLATILES	METALS	CYANIDE			MATRIX
S1	6/26/90	1140	✓	ELQ92	MELD82	S1	X	X	X	X	X			soil
S2	6/26/90	1216	✓	ELQ93	MELD83	S2	X	X	X	X	X			soil
S3	6/26/90	1345	✓	ELQ94	MELD84	S3	X	X	X	X	X			soil
S4	6/26/90	1505	✓	ELQ95	MELD85	S4	X	X	X	X	X			soil
S5	6/26/90	1610	✓	ELQ96	MELD86	S5	X	X	X	X	X			soil
S6	6/26/90	1455	✓	ELQ97	MELD87	S6	X	X	X	X	X			soil
MW1	6/26/90	1445	✓	ELR94	MELD89	~~S7~~ MW1	X	X	X	X	X			ground water
MW2	6/26/90	1600	✓	ELR95	MELD90	MW2	X	X	X	X	X			ground water
MW3	6/26/90	1700	✓	ELR96	MELD91	MW3	X	X	X	X	X			ground water
MW4	6/26/90	1730	✓	ELQ99	MELD94	MW4	X	X	X	X	X			ground water

TRANSFERRED BY: Daniel Sullivan (Signature) 6-26-90 (Date) 1805 (Time)

RECEIVED BY: R Anderson (Signature) 6/26/90 (Date) 1805 (Time)

TITLE: Env. Engineer

TELEPHONE: (309) 675-2337

DISTRIBUTION
WHITE: FIT SITE FILE
YELLOW: FACILITY/OCCUPANT
GREEN: FIT SAMPLE MANAGEMENT
PINK: U.S. EPA

M E M O R A N D U M

DATE: July 3, 1990
TO: File
FROM: Michael Phillips
SUBJECT: Texaco, Inc., Sales Term. 33083 Sample Paperwork

During the site inspection of the Texaco, Inc., Sales Term. 33083 site (FIL0602SA) on June 26, 1990, an error was made on the sample paperwork. The following correction should be noted:

> On the organic soil COC (#5-07861), the first three digits of all the tag numbers were written as 168; the first three digits should should be 186.

M E M O R A N D U M

DATE: July 3, 1990
TO: File
FROM: Michael Phillips
SUBJECT: Texaco, Inc., Sales Term. 33083 Sample Paperwork

During the site inspection of the Texaco, Inc., Sales Term. 33083 site (FIL0602SA) on June 26, 1990, an error was made on the sample paperwork. The following correction should be noted:

> On the organic soil COC (#5-07861), the first three digits of all the tag numbers were written as 168; the first three digits should should be 186.

Texaco Inc. / Phillips

#14427

① The tag numbers for your organic soils are transposed. They should be 186 instead of 168.

Please submit a typewritten memo for #1 ☺

Thanks,
Cathy

ecology and environment

recycled paper

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW1-MSD

SAMPLING DATE 6/26/90 SAMPLING TIME 1445

ORGANIC TRAFFIC NUMBER ELR94

INORGANIC TRAFFIC NUMBER MELD89

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080400	0053013
1l plastic	CN	080401	0053013
8oz glass (4)	ABN/pest/PCB	080402,03,06,07	A9135024
40ml glass (6)	VOA	080404,05,08-11	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: greyish tan water

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.83

CONDUCTIVITY 625 µmho

TEMPERATURE 25°C

recycled paper

ecology and environment

ecology and environment

SAMPLE DESCRIPTION

recycled paper

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW2

SAMPLING DATE 6/26/90 SAMPLING TIME 1600

ORGANIC TRAFFIC NUMBER ELR95

INORGANIC TRAFFIC NUMBER MELD90

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080412	0053013
1l plastic	CN	080413	0053013
8oz glass (2)	ABN/pest/PCB	080414,15	A9125044
40ml glass (2)	VOA	080416,17	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: light grey water

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.67

CONDUCTIVITY 850 µmho

TEMPERATURE 23°C

recycled paper

ecology and environment

ecology and environment

SAMPLE DESCRIPTION

recycled paper

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW3

SAMPLING DATE 6/26/90 SAMPLING TIME 1700

ORGANIC TRAFFIC NUMBER ELR96

INORGANIC TRAFFIC NUMBER MELD91

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080418	0053013
1l plastic	CN	080419	0053013
80oz glass (2)	ABN/pest/PCB	080420,21	A9135024
40ml glass (2)	VOA	080422,23	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: light brown

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.84

CONDUCTIVITY 430 µmho

TEMPERATURE 23°C

recycled paper

ecology and environment

ecology and environment

SAMPLE DESCRIPTION

recycled paper

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW-BLK

SAMPLING DATE 6/26/90 SAMPLING TIME 1630

ORGANIC TRAFFIC NUMBER ELR 97

INORGANIC TRAFFIC NUMBER MELD 92

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080424	0053013
1l plastic	CN	080425	0053013
8oz glass (2)	ABN/pest/PCB	080426,27	A 9125044
40ml glass (2)	VOA	080428,29	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: clear

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 5.97

CONDUCTIVITY 1 µmho

TEMPERATURE 30°C

recycled paper

ecology and environment

ecology and environment

SAMPLE DESCRIPTION

recycled paper

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION DUP (MW2)

SAMPLING DATE 6/26/90 SAMPLING TIME 1600

ORGANIC TRAFFIC NUMBER ELQ98

INORGANIC TRAFFIC NUMBER MELD93

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080430	0053013
1l plastic	CN	080431	0053013
8oz glass (2)	ABN/pest/PCB	080432,33	
40ml glass (2)	VOA	080434,35	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: light grey

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS

pH 6.67

CONDUCTIVITY 850 µmho

TEMPERATURE 23°C

recycled paper

ecology and environment

ecology and environment

recycled paper

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION MW4

SAMPLING DATE 6/26/90 SAMPLING TIME 1730

ORGANIC TRAFFIC NUMBER ELQ99

INORGANIC TRAFFIC NUMBER MELD94

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
1l plastic	Metals	080436	0053013
1l plastic	CN	080437	0053013
80oz glass (2)	ABN/pest/PCB	080438, 39	00115013
40ml glass (2)	VOA	080440, 41	B0047013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: light brown

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT:

when NaOH preservative was added to the CN sample a white precipitate formed

INSTRUMENT READINGS

pH 6.72

CONDUCTIVITY 1100

TEMPERATURE 20°C

recycled paper ecology and environment

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S1

SAMPLING DATE 6/26/90 SAMPLING TIME 1140

ORGANIC TRAFFIC NUMBER ELQ92

INORGANIC TRAFFIC NUMBER MELD82

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186068	0075023
8oz	ABN/Pest/PCB	186069	0135033
120ml (2)	VOA	186070,71	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown & tan sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS 8-10ppm organic vapors (above background)

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

ecology and environment
recycled paper

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S2

SAMPLING DATE 6/26/90 SAMPLING TIME 1210

ORGANIC TRAFFIC NUMBER ELQ93

INORGANIC TRAFFIC NUMBER MELD83

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186072	0075023
8oz	ABN/Pest/PCB	186073	0135033
120ml (2)	VOA	186074,75	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

recycled paper
ecology and environment

ecology and environment

recycled paper

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S3

SAMPLING DATE 6/26/90 SAMPLING TIME 1345

ORGANIC TRAFFIC NUMBER ELQ94

INORGANIC TRAFFIC NUMBER MELD84

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186076	0075023
8oz	ABN/Pest/PCB	186077	0135033
120ml (2)	VOA	186078, 79	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

recycled paper

ecology and environment

ecology and environment

recycled paper

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S4

SAMPLING DATE 6/26/90 SAMPLING TIME 1505

ORGANIC TRAFFIC NUMBER ELQ95

INORGANIC TRAFFIC NUMBER MELD85

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186080	0075023
8oz	ABN/Pest/PCB	186081	0135033
120ml (2)	VOA	186082,83	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

recycled paper

ecology and environment

ecology and environment

recycled paper

SAMPLE DESCRIPTION

SITE NAME/TDD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S5

SAMPLING DATE 6/26/90 SAMPLING TIME 1610

ORGANIC TRAFFIC NUMBER ELQ96

INORGANIC TRAFFIC NUMBER MELD86

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186084	0075023
8oz	ABN/Pest/PCB	186085	0135033
120ml (2)	VOA	186086,87	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

recycled paper

ecology and environment

ecology and environment

recycled paper

SAMPLE DESCRIPTION

SITE NAME/TOD# Texaco, Inc., Sales Term. 33083 / F05-8903-010

CASE NUMBER 14427

SAMPLE #/STATION LOCATION S6

SAMPLING DATE 6/26/90 SAMPLING TIME 1645

ORGANIC TRAFFIC NUMBER ELQ97

INORGANIC TRAFFIC NUMBER MELD87

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8oz	Met/CN	186088	0075023
8oz	ABN/Pest/PCB	186089	0135033
120ml (2)	VOA	186090, 91	0085013

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: brown sand

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

recycled paper

ecology and environment

SAMPLER CHECKLIST

ALL LOW CONCENTRATION SAMPLES

Site Name Texaco, Inc

All the below procedures have been followed and all coolers properly packaged for shipment.

Sampler Signature

Team Leader Signature

X 1. Is date shipped filled in on the OTR/ITR?

X 2. Is date and time of sample collection (Letter "F) filled in on the OTR/ITR?

X 3. Has either Shipment Complete or Shipment Not Complete been marked on the OTR/ITR?

X 4. On the C.O.C. form, is PAN in project no.; TDD/Case/SAS (if applicable) in project name for CLP and site name/case for CRL?

X 5. Are all dates and times on the C.O.C. form?

X 6. Has either grab or composite sample been marked on the C.O.C.?

X 7. Is the matrix filled out on each line of the C.O.C. form? (i.e., Soil, Water, Drinking Water) DO NOT USE ARROWS.

X 8. Is the Cooler # written on top of the C.O.C. form?

X 9. Is it referenced on the C.O.C.s which cooler # the OTR/ITR or the CRL tracking forms are in?

X 10. Are relinquish date, time, and signature on the bottom of the C.O.C.?

X 11. Is there one C.O.C. per cooler?

X 12. Has the proper paperwork been put in a plastic bag and taped to the inside of the cooler lid?

- o C.O.C. - Send white copy, bring back pink and yellow.
- o OTR/ITR - Send white and yellow copies and bring back blue/green and pink.
- o CRL tracking forms - send all of them.

SA002(04/18/90)

X 13. Is sample number, date, and time of collection permanently labeled on each sample bottle?

X 14. Are samples packaged in such a way to prevent breakage?

X 15. Have photographs been taken of each cooler showing ice, custody seals, and paperwork?

X 16. Are the coolers acceptable at Fed Ex?

- o Condition
- o Drain plug taped
- o Correctly labeled with address stickers

X 17. Are you sending the coolers to the correct lab? Are you using the correct lab acronym?

X 18. Did you call the SMC before 10:00 a.m. on the day after the sample shipment?

ONLY APPLIES TO WATERS

X 1. On the OTR/ITR forms, is the Sample Blank marked rinsate (4) in sample description (Letter "A").

X 2. For monitoring wells, has it been stated on the bottom of the inorganic C.O.C. whether the metals were filtered or not?

X 3. On the OTR/ITR forms, "blank" should be written under special handling (Letter "D") and on OTR, MSD should be marked in the same location.

X 4. Have the preservatives been written on the C.O.C. next to the bottle volume?

HNO_3 for Metals	$K_2Cr_2O_7$, $+HNO_3$ for Hg
NaOH for CN	HCL for VOA

X 5. Are sample water levels marked with a grease pencil on all sample bottles except for VOA?

RECEIPT FOR SAMPLES

U.S. EPA, 230 S. Dearborn St., Chicago, IL 60604

U. S. EPA ID NO ILD042844456

PROJ. ACCT. NO. FIL0602SA

TDD F05-8903-010

SPLIT SAMPLES ACCEPTED(✓) DECLINED( )

FACILITY/OCCUPANT NAME CATERPILLAR, INC.

FACILITY/OCCUPANT ADDRESS 1253 W. WASHINGTON EAST PEORIA, IL

SAMPLE NUMBER	DATE	TIME	SPLIT SAMPLES (✓)	OTR*	ITR*	DESCRIPTION OF SAMPLE LOCATIONS	SEMIVOLATILES	PESTICIDES/PCBS	VOLATILES	METALS	CYANIDE			MATRIX
S1	6/26/90	1140	✓	ELQ92	MELD82	S1	X	X	X	X	X			soil
S2	6/26/90	1216	✓	ELQ93	MELD83	S2	X	X	X	X	X			soil
S3	6/26/90	1345	✓	ELQ94	MELD84	S3	X	X	X	X	X			soil
S4	6/26/90	1505	✓	ELQ95	MELD85	S4	X	X	X	X	X			soil
S5	6/26/90	1610	✓	ELQ96	MELD86	S5	X	X	X	X	X			soil
S6	6/26/90	1455	✓	ELQ97	MELD87	S6	X	X	X	X	X			soil
MW1	6/26/90	1445	✓	ELR94	MELD89	~~MW2 6/26/90 S7~~ MW1	X	X	X	X	X			ground water
MW2	6/26/90	1600	✓	ELR95	MELD90	MW2	X	X	X	X	X			ground water
MW3	6/26/90	1700	✓	ELR96	MELD91	MW3	X	X	X	X	X			ground water
MW4	6/26/90	1730	✓	ELQ99	MELD94	MW4	X	X	X	X	X			ground water

TRANSFERRED BY

Daniel Sullivan (Signature) 6-26-90 (Date) 1805 (Time)

RECEIVED BY:

R Anderson (Signature) 6/26/90 (Date) 1805 (Time)

DISTRIBUTION
WHITE: FIT SITE FILE
YELLOW: FACILITY/OCCUPANT
GREEN: FIT SAMPLE MANAGEMENT
PINK: U.S. EPA

TITLE Env. Engineer

TELEPHONE (309) 675-2337

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: FIL0602
PROJECT NAME: F05-8903-010 / CASE #: 14427
SAMPLERS: (Signature) [signature]

~~ITK~~ MGP 6/26/90
Cooler# 657

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	8oz ABN/Pest/PCB	120ml VOA					Tag #	REMARKS Low conc matrix
ELQ92	6/26/90	1140		X	S1	3	1	2					168069-71	Soil
ELQ93	6/26/90	1210		X	S2	3	1	2					168073-75	Soil
ELQ94	6/26/90	1345		X	S3	3	1	2					168077-79	Soil
ELQ95	6/26/90	1505		X	S4	3	1	2					168081-83	Soil
ELQ96	6/26/90	1610		X	S5	3	1	2					168085-87	Soil
ELQ97	6/26/90	1645		X	S6	3	1	2					168089-91	Soil

Lot# 8oz: 0135033

120ml: 0085013

(OTR in cooler # 657)

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/26/90 1930				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Shipped Fed Ex to CompuChem Airbill # 7375419833 Custody seal 128578, 79	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

5- 07861

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: FIL0602
PROJECT NAME: F05-8903-010 / CASE 14427
SAMPLERS: (Signature) [signature]

Cooler # 157

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	ABN/pest/PCB 8oz	VOA (HCL) 40ml					REMARKS: Tag #	REMARKS: low conc matrix
ELR94	6/26/90	1445		X	MW1-MSD	10	4	6					080402-11	groundwater
ELR96	6/26/90	1700		X	(ELR96) MW3	4	2	2					080420-23	groundwater
~~ELR95~~ map 6/26/90														
~~ELR96~~ map 6/26/90														
~~ELR97~~ map 6/26/90														
~~ELQ94~~ map 6/26/90														
~~ELQ95~~ map 6/26/90														
													Lot# 8oz A9135024	
													40ml B0047013	
													(OTR in cooler # 657)	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/26/90 1930				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Shipped Fed Ex to Compuchem Airbill # 7375419833 Custody Seals 128572, 73	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

5- 07858

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: FIL0602
PROJECT NAME: FOS-8903-010 / CASE # 14427
SAMPLERS: (Signature)

Cooler #2

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Met/CN 802						REMARKS: Tag #	REMARKS: low conc. matrix
MEL082	6/26/90	1140		X	S1	1	1						186068	Soil
MEL083	6/26/90	1210		X	S2	1	1						186072	Soil
MEL084	6/26/90	1345		X	S3	1	1						186076	Soil
MEL085	6/26/90	1505		X	S4	1	1						186080	Soil
MEL086	6/26/90	1610		X	S5	1	1						186084	Soil
MEL087	6/26/90	~~1645~~ 6/26/90		X	1645 S6	1	1						186088	Soil
													~~Tag #~~ Lot # 0075023	
													(ITR in cooler # 2)	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
	6/26/90 1930				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Shipped Fed Ex to WEYER Airbill # 7375419822 Custody Seals 128580, 81	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

5- 07862

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

Cooler #241

PROJ. NO.: FIL0602
PROJECT NAME: F05-8903-010 / CASE 14427
SAMPLERS: (Signature) [signature]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Metals (HNO3) 1l plastic	CN (NaOH) 1l plastic					Tag #	REMARKS: low conc matrix
MELD89	6/26/90	1445		X	MW1	2	1	1					080400,01	groundwater
MELD90	6/26/90	1600		X	MW2	2	1	1					080412,13	groundwater
MELD91	6/26/90	1700		X	MW3	2	1	1					080418,19	groundwater
MELD92	6/26/90	1630		X	BLK	2	1	1					080424,25	groundwater
MELD93	6/26/90	1600		X	DUP	2	1	1					080430,31	groundwater
MELD94	6/26/90	~~1500~~ 1730 6/26/90		X	MW4	2	1	1					080436,37	groundwater

lot # : 0053013

Metals have been filtered (ITR in cooler #2)

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/26/90 1930				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Shipped FedEx to WEYER Airbill # 7375419822 Custody seals 128576,77	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

5- 07860

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: FIC0602
PROJECT NAME: F05-8903-010 / CASE 14427
SAMPLERS: (Signature) [signature]

Cooler #213

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	ABN/PEST/PCB 8000z	VOA(HCl) 40mL					Tag #	REMARKS: low conc matrix
ELR95	6/26/90	1600		X	MW2	4	2	2					080414-17	groundwater
ELR97	6/26/90	1630		X	BLK	4	2	2					080426-29	groundwater
ELQ98	6/26/90	1600		X	DUP	4	2	2					080432-35	groundwater
ELQ99	6/26/90	1730		X	MW4	4	2	2					080438-41	groundwater

Lot #: 80oz: A9135024 (MW2, DUP, BLK)
00115013 (MW4)
40ml: B0047013

(OTR in cooler # 657)

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	6/26/90 1930				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Shipped Fed Ex to Compuchem Airbill # 7375418833 Custody Seals 12874, 75	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number: 14427
SAS No. (if applicable):

1. Type of Activity (Check one): ☐ ENF ☐ NPLD ☐ RA ☒ SI ☐ STSI ☐ ER ☐ O&M ☐ RD ☐ ST ☐ Other (Specify) ☐ ESI ☐ PA ☐ RIFS ☐ STPA

2. Region Number: V
Sampling Co.: FIT
Sampler (Name): Michael Phillips

4. Date Shipped: 6/26/90
Carrier: F
Airbill Number: 7375419833

Non-Superfund Program

Site Name: Texaco, Inc, Sales Term, 33083
City, State: East Peoria, IL
Site Spill ID:

3. Ship To: CompuChem Labs
3308 Chapel Hill
RTP, NC 27709
attn Natalie Carter

Triple volume required for matrix spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans.

See reverse for additional instructions.

5. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.

CLP Sample Number (From labels)	(A) Sample Description (From box 5)	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA	BNA	Pest/PCB	ARO/TOX	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number
ELQ92	5	L	X	X	X			S1	6/26/90 1140	MELD82
ELQ93	5	L	X	X	X			S2	6/26/90 1210	MELD83
ELQ94	5	L	X	X	X			S3	6/26/90 1345	MELD84
ELQ95	5	L	X	X	X			S4	6/26/90 1505	MELD85
ELQ96	5	L	X	X	X			S5	6/26/90 1610	MELD86
ELQ97	5	L	X	X	X			S6	6/26/90 1654	MELD87
ELR94	2	L	X	X	X		MSD	MW1	6/26/90 1445	MELD89
ELR95	2	L	X	X	X			MW2	6/26/90 1600	MELD90
ELR96	2	L	X	X	X			MW3	6/26/90 1700	MELD91
~~Shipment is / is not complete~~										~~mAP 6/26/90~~
ELR97	4	L	X	X	X		BLANK	BLK	6/26/90 1630	MELD92
ELQ98	2	L	X	X	X			DUP	6/26/90 1600	MELD93
ELQ99	2	L	X	X	X			MW4	6/26/90 1730	MELD94

Shipment is complete

EPA Form 9110-2 (11-89) Replaces EPA Form 2075-7, which may be used. Blue - Region Copy Pink - SMO Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Inorganic Traffic Report
(For CLP Use Only)

Case Number: 14427
SAS No. (if applicable):

1. Type of Activity (Check one): ENF, NPLD, RA, [X] SI, STSI, ER, O&M, RD, ST, Other (Specify), ESI, PA, RIFS, STPA

2. Region Number: V
Sampling Co.: FIT
Sampler (Name): Michael Phillips

4. Date Shipped: 6/26/90
Airbill Number: 7375419822
Carrier: F

5. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

Non-Superfund Program

Site Name: Texaco, Inc, Sales Term. 33083
City, State: East Peoria, IL
Site Spill ID:

3. Ship To:
Weyerhaeuser
32901 weyerhaeuser ways.
WTC 2F25
Federal way, WA 98003
attn Bonnie Chappel

Double volume required for matrix spike/duplicate aqueous sample.
Ship medium and high concentration samples in paint cans.
See reverse for additional instructions.

CLP Sample Number (From labels)	(A) Sample Description (From box 1)	(B) Concentration L=low M=med H=high	(C) RAS Analysis: Total Metals	(C) RAS Analysis: Cyanide	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding Organic Sample Number
MELD82	5	L	X	X		S1	6/26/90 1140	ELQ92
MELD83	5	L	X	X		S2	6/26/90 1210	ELQ93
MELD84	5	L	X	X		S3	6/26/90 1345	ELQ94
MELD85	5	L	X	X		S4	6/26/90 1505	ELQ95
MELD86	5	L	X	X		S5	6/26/90 1610	ELQ96
MELD87	5	L	X	X		S6	6/26/90 1645	ELQ97
MELD89	~~5~~ mgP 6/26 2	L	X	X		MW1	6/26/90 1445	ELR94
MELD90	~~5~~ mgP 6/26 2	L	X	X		MW2	6/26/90 1600	ELR95
MELD91	~~5~~ mgP 6/26 2	L	X	X		MW3	6/26/90 1700	ELR96
					Shipment is/is not complete			mgP 6/26/90
MELD92	4	L	X	X	BLANK	BLK	6/26/90 1630	ELR97
MELD93	2	L	X	X		DUP	6/26/90 1600	ELQ98
MELD94	2	L	X	X		MW4	6/26/90 1730	ELQ99
					Shipment is complete			

EPA Form 9110-1 (8-88) Replaces EPA Form 2075-6, which may be used. Green - SMO Copy. Pink - Region Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

FEDERAL EXPRESS

MULTIPLE PACKAGE SHIPMENT LABELS

SHIPMENT DATE	6/26/90
MASTER AIRBILL NUMBER	7375419833

2 OF 3 — 5963078204

DESCRIPTION P-1 cooler

3 OF 3 — 5963078213

DESCRIPTION P-1 cooler

___ OF ___ — 5963078222

DESCRIPTION

___ OF ___ — 5963078231

DESCRIPTION

___ OF ___ — 5963078247

DESCRIPTION

PART #105972 NCREV REV. 10/88 © 1988 F.E.C.
SENDER'S COPY 2/90

USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII.
USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO AND ALL NON U.S. LOCATIONS.
QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 7375419833

175419833

SENDER'S COPY

nber — Date: 6/26/90

Phillips — Your Phone Number (Very Important): 312-775-7763

VIRONMENT — Department/Floor No.

ST HWY

State: IL — ZIP Required: 60646

2 To (Recipient's Name) Please Print: Natalie Carter — Recipient's Phone Number (Very Important): (919) 549-8263

Company: CompuChem Laboratories — Department/Floor No.

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip + Codes.): 3308 Chapel Hill/Nelson Hwy.

City: RTP — State: NC — ZIP Required: 27709

INFORMATION (First 24 characters will appear on invoice.): FILO602SA,24

Recipient's FedEx Acct. No. — 3 ☐ Bill 3rd Party FedEx Acct. No. — 4 ☐ Bill Credit Card

Expiration Date ___/___

H IF HOLD FOR PICK-UP, Print FEDEX Address Here — Street Address* — City — State — ZIP Required

	DELIVERY AND SPECIAL HANDLING	PACKAGES	WEIGHT In Pounds Only	YOUR DECLARED VALUE (See right)	OVER SIZE
Overnight ice / by next afternoon†)	1 ☐ HOLD FOR PICK-UP (Fill in Box H)	1	83		
	2 ☒ DELIVER WEEKDAY	1	55		
	3 DELIVER SATURDAY (Extra charge) (Not available to all locations) ☐				
EX LETTER *	4 ☐ DANGEROUS GOODS (Extra charge) (CSS not available for Dangerous Goods Shipments)	1	108		
EX PAK *	5 ☐ CONSTANT SURVEILLANCE SVC. (CSS) (Extra charge) (Release Signature Not Applicable)	Total 3	Total 246	Total	
EX BOX	6 ☐ DRY ICE ___ Lbs.				
EX TUBE	7 ☐ OTHER SPECIAL SERVICE ___				
ight Service Large or any over 150 lbs.)	8 ☐				
AVYWEIGHT **	9 ☐ SATURDAY PICK-UP (Extra charge)				
EFERRED EAVYWEIGHT **	10 ☐				
Value Limit $100. elivery schedule.	11 ☐ DESCRIPTION				
	12 ☐ HOLIDAY DELIVERY (If offered) (Extra charge)				

DIM SHIPMENT (Heavyweight Services Only) ☐ ___ lbs.

Received At: 1 ☐ Regular Stop — 3 ☐ Drop Box — 2 ☐ On-Call Stop — 4 ☐ B.S.C. — 5 ☐ Station

FedEx Emp. No. 117007 — Date/Time 6/26 1935

SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY

Use of this airbill constitutes your agreement to the service conditions in our current Service Guide, available upon request. See back of sender's copy of this airbill for information.

We will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, and document your actual loss for a timely claim. Maximum amount limitations found in the current Federal Express Service Guide apply. Your right to recover from Federal Express for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the declared value specified to the left. Recovery cannot exceed actual documented loss.

In the event of untimely delivery, Federal Express will at your request and with some limitations, refund all transportation charges paid. See Service Guide for further information.

Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.

5 Release Signature: ___

Federal Express Use: Base Charges — Declared Value Charge — Other 1 — Other 2 — Total Charges

REVISION DATE 11/89
PART #119501 FXLM 4/90
FORMAT #014
014
© 1989 F.E.C. PRINTED IN U.S.A.

FEDERAL EXPRESS

MULTIPLE PACKAGE SHIPMENT LABELS

SHIPMENT DATE	6-26-90
MASTER AIRBILL NUMBER	7375419822

2 OF 2 — 5963078152

DESCRIPTION P-1 Cook

___ OF ___ — 5963078161

DESCRIPTION

___ OF ___ — 5963078177

DESCRIPTION

___ OF ___ — 5963078186

DESCRIPTION

___ OF ___ — 5963078195

DESCRIPTION

PART #105972 NCREV REV. 10/88 © 1988 F.E.C.
SENDER'S COPY 2/90

USE THIS AIRBILL FOR DOMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII.
USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO AND ALL NON U.S. LOCATIONS.
QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 7375419822

7375419822

SENDER'S COPY

Number	Date
	6/26/90

Your Phone Number (Very Important)	To (Recipient's Name) Please Print	Recipient's Phone Number (Very Important)
Phillips 312-775-7763	2 Bonnie Chappel	(206) 924-6293

Department/Floor No.	Company	Department/Floor No.
NVIRONMENT	Weyerhaeuser	

	Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip® Codes.)
EST HWY	32901 Weyerhaeuser Way South, WTC 2F25

State	ZIP Required	City	State	ZIP Required
IL	60646	Federal Way	WA	98003

ICE INFORMATION (First 24 characters will appear on invoice.)
FIL0602SA, 24

IF HOLD FOR PICK-UP, Print FEDEX Address Here
H Street Address
City State ZIP Required

Bill Recipient's FedEx Acct. No. 3 ☐ Bill 3rd Party FedEx Acct. No. 4 ☐ Bill Credit Card
Expiration Date

	DELIVERY AND SPECIAL HANDLING	PACKAGES	WEIGHT In Pounds Only	YOUR DECLARED VALUE (See right)	OVER SIZE
d Overnight rvice ry by next afternoon†)	1 ☐ HOLD FOR PICK-UP (Fill in Box H)	1	35		
	2 ☒ DELIVER WEEKDAY	1	63		
	3 DELIVER SATURDAY (Extra charge) (Not available to all locations) ☐				
DEX LETTER *	4 ☐ DANGEROUS GOODS (Extra charge) (CSS not available for Dangerous Goods Shipments)				
DEX PAK *	5 ☐ CONSTANT SURVEILLANCE SVC. (CSS) (Extra charge) (Release Signature Not Applicable)	Total	Total	Total	
DEX BOX	6 ☐ DRY ICE ____ Lbs.	2	98		
DEX TUBE	7 ☐ OTHER SPECIAL SERVICE				
eight Service Large or any over 150 lbs.)	8 ☐				
	9 ☐ SATURDAY PICK-UP (Extra charge)				
EAVYWEIGHT **	10 ☐				
EFERRED EAVYWEIGHT **	11 ☐ DESCRIPTION				
Value Limit $100. elivery schedule.	12 ☐ HOLIDAY DELIVERY (If offered) (Extra charge)				

DIM SHIPMENT (Heavyweight Services Only) ☐ ____ lbs.

Received At
1 ☐ Regular Stop 3 ☐ Drop Box
4 ☐ B.S.C.
2 ☐ On-Call Stop 5 ☐ Station

FedEx Emp. No. 5 2 4 6 2 6 Date/Time

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REVISION DATE 11/89
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FORMAT #014
014

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

CRL Receipt Date 8/1/90 FIT Receipt Date 8/14/90 Review Completed 8/16/90

TO: D. Sullivan
FROM: C. Kouris
SUBJECT: Texaco Inc.
PAN: FIL06025A (1 hour charged for review) Case # 14427

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
#	Low Soil	# 6	Low Soil
	Low Water	6	Low Water
	Drinking Water		Drinking Water
	Other		Other

Project Data Status _____ Completed!!

X Incomplete, awaiting Org Soil & Low Waters

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 6/26/90

0759:2

recycled paper

CK 8/16/90

Soils

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number											
					S 1 MELD 82	S 2 MELD 83	S 3 MELD 84	S 4 MELD 85	S 5 MELD 86	S 6 MELD 87	7	8	9	10	11	12
				Analyte Detected (values in mg/kg or µg/L)												
Solid	A,D	MES	CSC/CWC	aluminum	2170	813	1090	3360	2130	4930						
Solid	A,D	MES	HM	antimony												
Solid	A,D	MES	HM	arsenic	7.1	3.2	3.6	4.3	10.2	8.3						
Solid	A,D	MES	CSC/CWC	barium	94.5NJ	11.2BNJ	15.8BNJ	41.1NJ	59.9NJ	51.3NJ						
Solid	A,D	MES	M	beryllium	.38B			.22B	.32B	.39B						
Solid	A,D	MES	HM	cadmium	4	1.1			2.8							
Solid	D	MES	CSC/CWC	calcium	30900	31900	38500	50500	39800	39600						
Solid	A,D	MES	HM	chromium	13.9	2.9	4.8	10.1	9.3	13.2						
Solid	A,D	MES	HM	cobalt	4.1B	2.6B	2.7B	5.4B	4.2B	6.3B						
Solid	A,D	MES	HM	copper	49.6	8	7.4	12.9	206	19.9						
Solid	A,D	MES	HM,CSC;CWC	iron	16900	4040	5540	13000	12100	12000						
Solid	A,D	MES	HM	lead	348*J	23.2*J	116*J	45*J	339*J	55.6*J						
Solid	A,D	MES	CSC/CWC	magnesium	11300*J	15000*J	17900*J	24100*J	19300*J	16600*J						
Solid	A,D	MES	HM	manganese	319N*J	173N*J	233N*J	438N*J	285N*J	376N*J						
Liquid	A,D	MES	HM	mercury	.3				9.8	.15						
Solid	A,D	MES	HM	nickel	9		6.4B	9.2	9.6	12.5						
Solid	D	MES	CSC,CWC	potassium				176B		519B						
Solid	A,D	MES	M	selenium												
Solid	A,D	MES	HM	silver	1.7B			1.2B	1.5B	.89B						
Solid	D	MES	CSC,CWC	sodium	196BJ	113BJ	122BJ	214BJ	190BJ	162BJ						
Solid	A,D	MES	HM	thallium	.69BNWJ	.49BNWJ		.47BNWJ	.2BNWJ	.39BNJ						
Solid	A,D	MES	HM	vanadium	8.2B	4B	5.3B	11.9	8.1B	12						
Solid	A,D	MES	CWL,CSC,HM	zinc	427E*J	41.8E*J	42E*J	76.6E*J	286E*J	112E*J						
Solid	A	IOC	IOC	cyanide												

— Not detected.

Table 4- (Cont.)

Low Water

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number 1 MELD 89	2 MELD90	3 Dup MELD93	4 MELD 91	5 Blank MELD92	6 MELD 94	7	8	9	10	11	12
				Analyte Detected (values in mg/kg or µg/L)												
Solid	A,D	MES	CSC/CWC	aluminum	97.8BJ	174BJ	133BJ	168BJ	280	71.7BJ						
Solid	A,D	MES	HM	antimony		25.7B										
Solid	A,D	MES	HM	arsenic	8.5B	2.4B	2B			1.2B						
Solid	A,D	MES	CSC/CWC	barium	150B	145B	153B	92.6B		86.8B						
Solid	A,D	MES	M	beryllium												
Solid	A,D	MES	HM	cadmium												
Solid	D	MES	CSC/CWC	calcium	268000	295000	315000	84100	553B	307000						
Solid	A,D	MES	HM	chromium												
Solid	A,D	MES	HM	cobalt												
Solid	A,D	MES	HM	copper												
Solid	A,D	MES	HM,CSC;CWC	iron	6660	8390	8700	629J	268	1010J						
Solid	A,D	MES	HM	lead	13.1J	1.8BWJ	1.8BWJ	5.9J	3.6	2.4BWJ						
Solid	A,D	MES	CSC/CWC	magnesium	21700	32900	35200	16000		30800						
Solid	A,D	MES	HM	manganese	847	1020	1080	492	5.1B	1800						
Liquid	A,D	MES	HM	mercury												
Solid	A,D	MES	HM	nickel												
Solid	D	MES	CSC,CWC	potassium	17300	18500	20000	5150		17700						
Solid	A,D	MES	M	selenium	3.3NWJ			3.1NWJ								
Solid	A,D	MES	HM	silver												
Solid	D	MES	CSC,CWC	sodium	26800	19400	20600	17800	627BJ	31300						
Solid	A,D	MES	HM	thallium	1.3BJ	1BJ	2.7BJ	3.1BJ		1.3BJ						
Solid	A,D	MES	HM	vanadium			2.5B									
Solid	A,D	MES	CWL,CSC,HM	zinc	22J	68.5J	41.5J	26.2J	26.9J	118J						
Solid	A	IOC	IOC	cyanide												

— Not detected.

Table 4- (Cont.)

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRQL.
J	Indicates an estimated value.	Compound value may be semiquantitative.
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µL in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS		DEFINITION	INTERPRETATION
E	E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	S	Analysis by Method of Standard Additions.	Value is quantitative.
R	N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ		DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J		Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
U	U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
	M	Duplicate injection precision not met.	Value may be semiquantitative.
	W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
	R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

8/21/90

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 8·14·90 8/16/90

SUBJECT: Review of Region V CLP Data
Received for Review on August 1, 1990

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory Jay Thompson

TO: Data User: FIT

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

SITE NAME: TEXACO INC. SALES TE (IL) SMO Case No. 14427

EPA Data Set No. _____ No. of Samples: 12 D.U./Activity Numbers 1

CRL No. _____

SMO Traffic No. MELD82-87, 89-94

CLP Laboratory: WEYER HAEUSER Hrs. Required for Review: 12 +1 DX 8/10

Following are our findings.

SEE NEXT PAGE

James Rollin
8/10/90

( ) Data are acceptable for use.
(x) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

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

The laboratory's portion of case 14427 contains 6 low level soil and 6 low level water samples analyzed for total metals and cyanides.

LABORATORY: WEYER **CASE: 14427**

SOILS [MELD82-87]

ICP ANALYSES: The soil duplicate RPDs for Cu [CRDL], Fe [30.0%], Mg [39.8%], and Mn [20.9%] were flagged [*] by the lab. The duplicate RPDs for Fe and Mn does not exceed the technical criteria, 35% for soils. The duplicate difference for Cu does not exceed the technical criteria, 2xCRDL for soils. All soil Cu and Fe data are acceptable. All soil Mn data are qualified below. All soil Mg data are estimated [J] due to poor precision.

The soil duplicate RPD for Zn [41.4%] was flagged [*] by the lab. The serial dilution audit for Zn [16.0%] was flagged [E] by the lab. All soil Zn data are estimated [J] due to poor precision and interferences.

The soil duplicate RPDs for Ag [200.0%] and V [48.5%] were not flagged by the lab, since the duplicate difference does not exceed the technical criteria, 2xCRDL for soils. All soil Ag and V data are acceptable.

The soil matrix spike recovery for Ba [131.4%] and Mn [154.6%] were flagged [N] by the lab. All soil Ba and Mn data are estimated [J] due to high bias.

The soil preparation blank contains Na [60.774 mg/Kg]. All soil Na data are estimated [J] due to contamination.

GFAA ANALYSES: The soil duplicate RPD for Pb [44.6%] was flagged [*] by the lab. The soil matrix spike recovery for Pb [3974.1%] was not flagged by the lab, since the sample concentration was more then 4x the spike level. All soil Pb results are estimated [J] due to poor precision.

The soil matrix spike recovery for Se [59.0%] was flagged [N] by the lab. The analytical spike recovery for all Se soil results were flagged [W] by the lab. A ICV recovery of 88.2% affected Se result MELD82. All soil Se results are estimated [UJ] due to possible elevation of the detection limit and interferences.

The CCV recovery of 116.9% affected As results on MELD84-87. As results on MELD84-87 are estimated [J] due to high bias.

The soil matrix spike recovery for Tl [69.8%] was flagged [N] by the lab. The analytical spike recovery for Tl results on MELD82-83, 85-86 were flagged [W] by the lab. The CCB contained Tl [1.9 ug/L, 3.1 ug/L] affecting MELD82-83, 87. Tl results for MELD82-83, 85-87 are estimated [J], MELD82-83 due to low bias, interferences, and contamination, MELD85-86 due to low bias and interferences, and MELD87 due to low bias and contamination. Tl result for MELD84 is estimated [UJ] due to possible elevation of the detection limit.

OTHER ANALYSES: All soil Hg and Cn data are acceptable.

WATER [MELD89-94]

ICP ANALYSES: The duplicate RPD for Sb [200.0%], Al [28.7%], and Cr [200.0%] were not flagged by the lab since the duplicate difference does not exceed the technical criteria, +/- CRDL. All water Sb and Cr data are acceptable. All water Al data are qualified below.

The water preparation blank contained Al [38.4 ug/L] and Na [184.0 ug/L]. Al data on MELD89-91, 93-94 and Na data on MELD92 are estimated [J] due to contamination.

GFAA ANALYSES: All water Se results that had MSA done had sample absorbencies <50% of the analytical spike. In the reviewers professional judgement and after checking the raw data, the MSA did not need to be done. The original Se results were reinstated and flagged [W] by the reviewer.

After checking and recalculating the raw data, the reviewer removed the [*] flag for Se, the [N] flag for Tl, and changed concentrations for Se and Tl on Forms I, III, V, and VI.

The water matrix spike recovery for Se [45.0%] was flagged [N] by the lab. The analytical spike recovery for Se results on MELD89-91, 93-94 were flagged [W] by the reviewer or the lab. Se results on MELD89, 91 are estimated [J] due to low bias and interferences. Se results on MELD90, 92-94 are estimated [UJ], MELD90, 93-94 due to possible elevation of the detection limit and interferences, and MELD92 due to possible elevation of the detection limit.

The CCB contained Tl [1.9 ug/L]. Tl results on MELD89-91, 93-94 are estimated [J] due to contamination.

The analytical spike recovery for Pb results on MELD90, 93-94 were flagged [W] by the lab. Pb results on MELD90, 93-94 are estimated [J] due to interferences.

OTHER ANALYSES: All water Hg and CN data are acceptable.

Sample MELD92 is a water field blank containing Al [280.0 ug/L], Fe [286.0 ug/L], Pb [3.6 ug/L], and Zn [26.9 ug/L]. Al data on MELD89-91, 93-94 and Pb data on MELD90, 93-94 are affected, but remain qualified as stated above. Zn data on MELD89-91, 93-94 are affected, but are qualified below. Pb data on MELD89, 91, and Fe data on MELD91, 94 are estimated [J] due to field blank contamination.

Samples MELD90 & 93 are water field duplicates. The duplicate RPD for Zn [49.1%] is out of control. All water Zn data are estimated [J] due to poor field precision.

Reviewed by: James Redlin

Date: 8/10/90

James Redlin

QC EXCEPTION SUMMARY REPORT

CASE # 14427
DATA SET #
LAB Q.C. #
DATE: 8/8/90

SITE Texaco Inc. Sales Te (IL)
LAB WEYERHAEUSER
REVIEWED BY J. Reddin

MATRIX: Water & Soil
CONC. : Low
6 water
6 soil

WATER SAMPLE SPK.
WATER SAMPLE DUP.
SOIL SAMPLE SPK.
SOIL SAMPLE DUP.

	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC (water)			REGIONAL QC			OTHER/ COMMENTS
	Holding Time	Cal Blanks	Init Cal ver	Contin Cal ver	Prep Blk AQ (µg/L)	Prep Blk SOL (mg/Kg)	ICS %R	LCS % AQ	LCS % SOL	Sol Dup RPD	Sol Spk %R	AQ Dup RPD	AQ Spk %R	Ser Dilu AQ	Ser Dilu SOL	GFAA Dup	GFAA Spike	Blank (92) µg/L	Dup RPD (90&93)	Spike %R	Blind Blank	Blind Spike %R	Split Sample RPD	
Aluminum	ok			ok	38.4	~~15.794~~	ok	ok	ok					ok				28.0						
Antimony												(200.0)												
Arsenic		~~[illegible]~~		116.9		~~0.603~~																		
Barium						~~0.603~~					131.4													
Beryllium																								
Cadmium																								
Calcium					~~23.6~~	~~5.982~~												~~553~~						
Chromium												(200.0)												
Cobalt																								
Copper		~~6.9~~						<2x CRDL		59.9														
Iron										30.0								26.8						
Lead										44.6	(39741)							3.6						
Magnesium										39.8														
Manganese										20.9	154.6							~~5.1~~						
Mercury	27 day																							
Nickel																								
Potassium																								
Selenium			88.2								59.0	~~107.7~~	~~48.9~~											
Silver										(200.0)														
Sodium					184.0	60.774												~~629~~						
Thallium		3.1 ~~[illegible]~~		125.4							69.8	~~(200.0)~~	~~36.6~~	85.2				~~[illegible]~~						
Tin																								
Vanadium										(48.5)														
Zinc						~~1.174~~				41.4					16.0			26.9	49.1					
Cyanide	6 day																							

6/26/90

DPO: [ ] ACTION [X] FYI

Region 4

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 14427 LABORATORY WEYER

SDG NO. MELD82 DATA USER FIT

SOW 7/88 REVIEW COMPLETION DATE 8/10/90

NO. OF SAMPLES _____ WATER 6 SOIL _____ OTHER -

REVIEWER [ ] ESD [X] ESAT [ ] OTHER, CONTRACT/CONTRACTOR _____

	ICP	AA	Hg	CYANIDE
1. HOLDING TIMES	O	O	O	O
2. INITIAL CALIBRATIONS	O	X	O	O
3. CONTINUING CALIBRATIONS	O	X	O	O
4. FIELD BLANKS ('F' = not applicable)	F	F	F	F
5. LABORATORY BLANKS	X	X	O	O
6. ICS	O			
7. LCS	O	O		
8. DUPLICATE ANALYSIS	M	X	O	O
9. MATRIX SPIKE	M	M	O	O
10. MSA		O		
11. SERIAL DILUTION	O			
12. SAMPLE VERIFICATION	O	O	O	O
13. REGIONAL QC ('F' = not applicable)	F	F	F	F
14. OVERALL ASSESSMENT	M	M	O	O

O = No problems or minor problems that do not affect data usability.
X = No more than *about* 5% of the data points are qualified as either estimated or unusable.
M = More than *about* 5% of the data points are qualified as estimated.
Z = More than *about* 5% of the data points are qualified as unusable.

DPO ACTION ITEMS: _____

AREAS OF CONCERN: _____

DPO: [ ] ACTION [X] FYI

Region IV

INORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 14427 LABORATORY W. E. YER

SDG NO. MELD82 DATA USER FIT

SOW 7/88 REVIEW COMPLETION DATE 8/10/90

NO. OF SAMPLES 6 WATER ____ SOIL ____ OTHER ____

REVIEWER [ ] ESD [X] ESAT [ ] OTHER, CONTRACT/CONTRACTOR ____

	ICP	AA	Hg	CYANIDE
1. HOLDING TIMES	O	O	O	O
2. INITIAL CALIBRATIONS	O	O	O	O
3. CONTINUING CALIBRATIONS	O	O	O	O
4. FIELD BLANKS ('F' = not applicable)	X	X	O	O
5. LABORATORY BLANKS	X	X	O	O
6. ICS	O			
7. LCS	O	O		
8. DUPLICATE ANALYSIS	O	O	O	O
9. MATRIX SPIKE	O	M	O	O
10. MSA		O		
11. SERIAL DILUTION	O			
12. SAMPLE VERIFICATION	O	O	O	O
13. REGIONAL QC ('F' = not applicable)	F	F	F	F
14. OVERALL ASSESSMENT	X	M	O	O

O = No problems or minor problems that do not affect data usability.
X = No more than *about* 5% of the data points are qualified as either estimated or unusable.
M = More than *about* 5% of the data points are qualified as estimated.
Z = More than *about* 5% of the data points are qualified as unusable.

DPO ACTION ITEMS: ____

AREAS OF CONCERN: ____

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

SOW No.: 7/88

EPA Sample No.	Lab Sample ID.
MELD82	52285
MELD83	52286
MELD84	52287
MELD84D	52287D
MELD84S	52287S
MELD85	52288
MELD86	52289
MELD87	52290
MELD89	52291
MELD89D	52291D
MELD89S	52291S
MELD90	52292
MELD91	52293
MELD92	52294
MELD93	52295
MELD94	52296

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES
If yes, were raw data generated before application of background corrections? Yes/No NO

Comments:
LEAD BY GFAAS DILUTION FACTORS ARE BASED ON ICP LEAD RESULTS.

I certify that this data package is in compliance with the terms, and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Kari Dresse Name: Kari Dresse

Date: 7-31-90 Title: Lab Mgr

U.S. EPA - CLP

1 A

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD82

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52285

Level (low/med): LOW Date Received: 06/27/90

% Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2170			P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	27.5			F
7440-39-3	Barium	94.5		N	P
7440-41-7	Beryllium	0.38	B		P
7440-43-9	Cadmium	4.0			P
7440-70-2	Calcium	30900			P
7440-47-3	Chromium	13.9			P
7440-48-4	Cobalt	4.1	B		P
7440-50-8	Copper	49.6		*	P
7439-89-6	Iron	16900		*	P
7439-92-1	Lead	348		*	F
7439-95-4	Magnesium	11300		*	P
7439-96-5	Manganese	319		N*	P
7439-97-6	Mercury	0.30			CV
7440-02-0	Nickel	9.0			P
7440-09-7	Potassium	122	U		P
7782-49-2	Selenium	0.61	U	NW	F
7440-22-4	Silver	1.7	B		P
7440-23-5	Sodium	196	B		P
7440-28-0	Thallium	0.69	B	NW	F
7440-62-2	Vanadium	8.2	B		P
7440-66-6	Zinc	427		E*	P
	Cyanide	0.54	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

10

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD83

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52286

Level (low/med): LOW Date Received: 06/27/90

% Solids: 94.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	813			P
7440-36-0	Antimony	3.9	U		P
7440-38-2	Arsenic	3.2			F
7440-39-3	Barium	11.2	B	N	P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium	31900			P
7440-47-3	Chromium	2.9			P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	8.0		*	P
7439-89-6	Iron	4040		*	P
7439-92-1	Lead	23.2		*	F
7439-95-4	Magnesium	15000		*	P
7439-96-5	Manganese	173		N*	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.9	U		P
7440-09-7	Potassium	119	U		P
7782-49-2	Selenium	0.59	U	NW	F
7440-22-4	Silver	0.59	U		P
7440-23-5	Sodium	113	B		P
7440-28-0	Thallium	0.49	B	NW	F
7440-62-2	Vanadium	4.0	B		P
7440-66-6	Zinc	41.8		E*	P
	Cyanide	0.52	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1C

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD84

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52287

Level (low/med): LOW Date Received: 06/27/90

% Solids: 96.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1090			P
7440-36-0	Antimony	3.5	U		P
7440-38-2	Arsenic	3.4			F
7440-39-3	Barium	15.8	B	N	P
7440-41-7	Beryllium	0.18	U		P
7440-43-9	Cadmium	0.88	U		P
7440-70-2	Calcium	38500			P
7440-47-3	Chromium	4.8			P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	7.4		*	P
7439-89-6	Iron	5540		*	P
7439-92-1	Lead	116		*	F
7439-95-4	Magnesium	13900		*	P
7439-96-5	Manganese	233		N*	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	6.4	B		P
7440-09-7	Potassium	106	U		P
7782-49-2	Selenium	0.53	U	NW	F
7440-22-4	Silver	0.53	U		P
7440-23-5	Sodium	122	B		P
7440-28-0	Thallium	0.19	U	N	F
7440-62-2	Vanadium	5.3	B		P
7440-66-6	Zinc	42.0		E*	P
	Cyanide	0.51	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1D

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD85

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52288

Level (low/med): LOW Date Received: 06/27/90

% Solids: 93.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3360			P
7440-36-0	Antimony	3.9	U		P
7440-38-2	Arsenic	3.7			F
7440-39-3	Barium	41.1		N	P
7440-41-7	Beryllium	0.22	B		P
7440-43-9	Cadmium	0.97	U		P
7440-70-2	Calcium	50500			P
7440-47-3	Chromium	10.1			P
7440-48-4	Cobalt	5.4	B		P
7440-50-8	Copper	12.9		*	P
7439-89-6	Iron	13000		*	P
7439-92-1	Lead	45.0		*	F
7439-95-4	Magnesium	24100		*	P
7439-96-5	Manganese	438		N*	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	9.2			P
7440-09-7	Potassium	176	B		P
7782-49-2	Selenium	0.58	U	NW	F
7440-22-4	Silver	1.2	B		P
7440-23-5	Sodium	214	B		P
7440-28-0	Thallium	0.47	B	NW	F
7440-62-2	Vanadium	11.9			P
7440-66-6	Zinc	76.6		E*	P
	Cyanide	0.54	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1E

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD86

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52289

Level (low/med): LOW Date Received: 06/27/90

% Solids: 86.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2130			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	9.9			F
7440-39-3	Barium	59.9		N	P
7440-41-7	Beryllium	0.32	B		P
7440-43-9	Cadmium	2.8			P
7440-70-2	Calcium	39800			P
7440-47-3	Chromium	9.3			P
7440-48-4	Cobalt	4.2	B		P
7440-50-8	Copper	206		*	P
7439-89-6	Iron	12100		*	P
7439-92-1	Lead	339		*	F
7439-95-4	Magnesium	19300		*	P
7439-96-5	Manganese	285		N*	P
7439-97-6	Mercury	9.8			CV
7440-02-0	Nickel	9.6			P
7440-09-7	Potassium	116	U		P
7782-49-2	Selenium	0.58	U	NW	F
7440-22-4	Silver	1.5	B		P
7440-23-5	Sodium	190	B		P
7440-28-0	Thallium	0.20	B	NW	F
7440-62-2	Vanadium	8.1	B		P
7440-66-6	Zinc	286		E*	P
	Cyanide	0.57	U		AC

olor Before: BROWN Clarity Before: Texture: MEDIUM

olor After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1 F

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD87

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52290

Level (low/med): LOW Date Received: 06/27/90

% Solids: 92.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4930			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	8.7			F
7440-39-3	Barium	51.3		N	P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.96	U		P
7440-70-2	Calcium	39600			P
7440-47-3	Chromium	13.2			P
7440-48-4	Cobalt	6.3	B		P
7440-50-8	Copper	19.9		*	P
7439-89-6	Iron	12000		*	P
7439-92-1	Lead	55.6		*	F
7439-95-4	Magnesium	16600		*	P
7439-96-5	Manganese	376		N*	P
7439-97-6	Mercury	0.15			CV
7440-02-0	Nickel	12.5			P
7440-09-7	Potassium	519	B		P
7782-49-2	Selenium	0.58	U	NW	F
7440-22-4	Silver	0.89	B		P
7440-23-5	Sodium	162	B		P
7440-28-0	Thallium	0.39	B	N	F
7440-62-2	Vanadium	12.0			P
7440-66-6	Zinc	112		E*	P
	Cyanide	0.53	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1G

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD89

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Lab Sample ID: 52291

Level (low/med): LOW Date Received: 06/27/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	97.8	B		P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	8.5	B		F
7440-39-3	Barium	150	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	268000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	6.0	U		P
7439-89-6	Iron	6660			P
7439-92-1	Lead	13.1			F
7439-95-4	Magnesium	21700			P
7439-96-5	Manganese	847			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	20.0	U		P
7440-09-7	Potassium	17300			P
7782-49-2	Selenium	3.3 ~~12.7~~		N~~*~~W	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	26800			P
7440-28-0	Thallium	1.3	B	N	F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	22.0			P
	Cyanide	10.0	U		AC

All corrections JAR 8/10/90

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1 H

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD90

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Lab Sample ID: 52292

Level (low/med): LOW Date Received: 06/27/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	174	B		P
7440-36-0	Antimony	25.7	B		P
7440-38-2	Arsenic	2.4	B		F
7440-39-3	Barium	145	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	295000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	6.0	U		P
7439-89-6	Iron	8390			P
7439-92-1	Lead	1.8	B	W	F
7439-95-4	Magnesium	32900			P
7439-96-5	Manganese	1020			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	20.0	U		P
7440-09-7	Potassium	18500			P
7782-49-2	Selenium	3.0	U	NW~~*~~	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	19400			P
7440-28-0	Thallium	1.0 ~~1.8~~	B	~~N~~	F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	68.5			P
	Cyanide	10.0	U		AC

All corrections JAR 8/10/90

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1 I

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD91

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Lab Sample ID: 52293

Level (low/med): LOW Date Received: 06/27/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	168	B		P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	92.6	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	84100			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	6.0	U		P
7439-89-6	Iron	629			P
7439-92-1	Lead	5.9			F
7439-95-4	Magnesium	16000			P
7439-96-5	Manganese	492			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	20.0	U		P
7440-09-7	Potassium	5150			P
7782-49-2	Selenium	3.1 ~~5.0~~		N*~~*W	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	17800			P
7440-28-0	Thallium	3.1	B	~~N~~	F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	26.2			P
	Cyanide	10.0	U		AC

All corrections JAR 8/10/90

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1 J

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD92

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Lab Sample ID: 52294

Level (low/med): LOW Date Received: 06/27/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	280			P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	1.0	U		F
7440-39-3	Barium	2.0	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	553	B		P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	6.0	U		P
7439-89-6	Iron	268			P
7439-92-1	Lead	3.6			F
7439-95-4	Magnesium	534	U		P
7439-96-5	Manganese	5.1	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	20.0	U		P
7440-09-7	Potassium	604	U		P
7782-49-2	Selenium	3.0	U	N*	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	627	B		P
7440-28-0	Thallium	1.0	U	~~N~~	F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	26.9			P
	Cyanide	10.0	U		AC

All corrections JAR 8/10/90

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1 K

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD93

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Lab Sample ID: 52295

Level (low/med): LOW Date Received: 06/27/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	133	B		P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	2.0	B		F
7440-39-3	Barium	153	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	315000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	6.0	U		P
7439-89-6	Iron	8700			P
7439-92-1	Lead	1.8	B	W	F
7439-95-4	Magnesium	35200			P
7439-96-5	Manganese	1080			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	20.0	U		P
7440-09-7	Potassium	20000			P
7782-49-2	Selenium	3.0	U	NW*	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	20600			P
7440-28-0	Thallium	2.7	B	~~N~~	F
7440-62-2	Vanadium	2.5	B		P
7440-66-6	Zinc	41.5			P
	Cyanide	10.0	U		AC

All corrections JAR 8/10/90

Color Before: GREEN Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1 L

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD94

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Lab Sample ID: 52296

Level (low/med): LOW Date Received: 06/27/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	71.7	B		P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	1.2	B		F
7440-39-3	Barium	86.8	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	307000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	6.0	U		P
7439-89-6	Iron	1010			P
7439-92-1	Lead	2.4	B	W	F
7439-95-4	Magnesium	30800			P
7439-96-5	Manganese	1800			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	20.0	U		P
7440-09-7	Potassium	17700			P
7782-49-2	Selenium	3.0 ~~9.8~~	U	N~~*~~ W	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	31300			P
7440-28-0	Thallium	1.3	B	~~N~~	F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	118			P
	Cyanide	10.0	U		AC

All corrections JAR 8/10/90

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

3A
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	32.0	U	32.0	U	32.0	U	32.0	U	38.4	B	P
Antimony	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	P
Arsenic	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	F
Barium	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	P
Cadmium	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	P
Calcium	8.0	U	8.0	U	8.0	U	8.0	U	23.6	B	P
Chromium	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Copper	6.0	U	6.0	U	6.9	B	6.0	U	6.0	U	P
Iron	49.0	U	49.0	U	49.0	U	49.0	U	49.0	U	P
Lead	1.0	U	1.0	U	1.0	U			1.0	U	F
Magnesium	534.0	U	534.0	U	534.0	U	534.0	U	534.0	U	P
Manganese	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Mercury	0.2	U	0.2	U	0.2	U			0.2	U	CV
Nickel	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	P
Potassium	604.0	U	604.0	U	604.0	U	604.0	U	604.0	U	P
Selenium	3.0	U	3.0	U	3.0	U			3.0	U	F
Silver	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	P
Sodium	107.0	U	107.0	U	107.0	U	107.0	U	184.0	B	P
Thallium	1.0	U	1.8 ~~37.5~~	B	1.9	B	1.0	U	1.0	U	F
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Zinc	3.0	U	3.0	U	4.7	B	3.0	U	3.0	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	AC

JAR 8/10/90

U.S. EPA - CLP

3 B
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			32.0	U					15.794	B	P
Antimony			-21.8	B					-4.254	B	P
Arsenic			1.0	U	1.2	B	1.0	U	0.200	U	F
Barium			2.0	U					0.603	B	P
Beryllium			1.0	U					0.200	U	P
Cadmium			5.0	U					1.000	U	P
Calcium			8.0	U					5.582	B	P
Chromium			5.0	U					1.000	U	P
Cobalt			2.0	U					0.400	U	P
Copper			6.0	U					1.200	U	P
Iron			49.0	U					9.800	U	P
Lead									0.200	U	F
Magnesium			534.0	U					106.800	U	P
Manganese			2.0	U					0.400	U	P
Mercury									0.100	U	CV
Nickel			20.0	U					4.000	U	P
Potassium			604.0	U					120.800	U	P
Selenium									0.600	U	F
Silver			3.0	U					0.600	U	P
Sodium			107.0	U					60.774	B	P
Thallium			1.0	U	3.1	B			0.200	U	F
Vanadium			2.0	U					0.400	U	P
Zinc			3.0	U					1.174	B	P
Cyanide			10.0	U	10.0	U			0.500	U	AC

U.S. EPA - CLP

3C
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	32.0	U	32.0	U	32.0	U	32.0	U			P
Antimony	20.0	U	20.0	U	20.0	U	20.0	U			P
Arsenic											
Barium	2.0	U	2.0	U	2.0	U	2.0	U			P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U			P
Cadmium	5.0	U	5.0	U	5.0	U	5.0	U			P
Calcium	8.0	U	8.0	U	8.0	U	8.0	U			P
Chromium	5.0	U	5.0	U	5.0	U	5.0	U			P
Cobalt	2.0	U	2.0	U	2.0	U	-2.4	B			P
Copper	6.0	U	6.0	U	6.0	U	6.0	U			P
Iron	49.0	U	49.0	U	49.0	U	49.0	U			P
Lead	1.0	U	1.0	U	1.0	U	1.0	U			F
Magnesium	534.0	U	534.0	U	534.0	U	534.0	U			P
Manganese	2.0	U	2.0	U	2.0	U	2.0	U			P
Mercury	0.2	U	0.2	U							CV
Nickel	20.0	U	20.0	U	20.0	U	20.0	U			P
Potassium	604.0	U	604.0	U	604.0	U	604.0	U			P
Selenium	3.0	U	3.0	U							F
Silver	3.0	U	3.0	U	3.0	U	3.0	U			P
Sodium	107.0	U	107.0	U	107.0	U	107.0	U			P
Thallium	-1.7	B	1.0	U							F
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U			P
Zinc	3.0	U	3.0	U	3.0	U	3.0	U			P
Cyanide											

U.S. EPA - CLP

3 D
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead			1.0	U							F
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

3E
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium	3.0	U	3.0	U	3.0	U	3.0	U			F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

3 F
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			3.0	U							F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

3G
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium	3.0	U	3.0	U							F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

5A A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MELD84S

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Level (low/med): LOW
% Solids for Sample: 96.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	86.1786		3.5019	U	97.46	88.4		P
Arsenic	75-125	9.8692		3.3621		8.02	81.1		F
Barium	75-125	528.2087		15.8365	B	389.83	131.4	N	P
Beryllium	75-125	8.3929		0.1751	U	9.75	86.1		P
Cadmium	75-125	8.3469		0.8755	U	9.75	85.6		P
Calcium									NR
Chromium	75-125	42.7320		4.7673		38.98	97.4		P
Cobalt	75-125	95.5460		2.7025	B	97.46	95.3		P
Copper	75-125	54.2162		7.4166		48.73	96.0		P
Iron									NR
Lead		275.8164		116.4538		4.01	3974.1		F
Magnesium									NR
Manganese	75-125	383.6085		232.9020		97.46	154.6	N	P
Mercury	75-125	0.5630		0.0984	U	0.52	108.3		CV
Nickel	75-125	94.0028		6.4158	B	97.46	89.9		P
Potassium									NR
Selenium	75-125	1.1500		0.5253	U	1.95	59.0	N	F
Silver	75-125	10.5339		0.5253	U	9.75	108.0		P
Sodium									NR
Thallium	75-125	7.0007		0.1878	U	10.03	69.8	N	F
Vanadium	75-125	104.7315		5.2515	B	97.46	102.1		P
Zinc	75-125	132.6000		42.0165		97.46	92.9		P
Cyanide	75-125	5.8813		0.5114	U	5.11	115.1		AC

Comments:

U.S. EPA - CLP

5A B
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MELD89S

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Level (low/med): LOW
% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	1936.7759		97.8466	B	2000.00	91.9		P
Antimony	75-125	484.7377		20.0000	U	500.00	96.9		P
Arsenic	75-125	40.7000		8.5000	B	40.00	80.5		F
Barium	75-125	2071.4639		150.4476	B	2000.00	96.1		P
Beryllium	75-125	48.4343		1.0000	U	50.00	96.9		P
Cadmium	75-125	45.7243		5.0000	U	50.00	91.4		P
Calcium									NR
Chromium	75-125	191.9167		5.0000	U	200.00	96.0		P
Cobalt	75-125	469.3171		2.0000	U	500.00	93.9		P
Copper	75-125	243.1008		6.0000	U	250.00	97.2		P
Iron		7693.0947		6656.2666		1000.00	103.7		P
Lead	75-125	29.7000		13.1000		20.00	83.0		F
Magnesium									NR
Manganese	75-125	1314.2279		846.5362		500.00	93.5		P
Mercury	75-125	0.9100		0.2000	U	1.00	91.0		CV
Nickel	75-125	475.5420		20.0000	U	500.00	95.1		P
Potassium									NR
Selenium	75-125	7.8000		3.3000 ~~12.6923~~	B	10.00	45.0 ~~48.9~~	N	F
Silver	75-125	46.6079		3.0000	U	50.00	93.2		P
Sodium									NR
Thallium	75-125	43.9000 ~~19.6000~~		1.3000	B	50.00	85.2 ~~36.6~~	~~N~~	F
Vanadium	75-125	483.7856		2.0000	U	500.00	96.8		P
Zinc	75-125	477.8771		22.0287		500.00	91.2		P
Cyanide	75-125	110.0000		10.0000	U	100.00	110.0		AC

Comments:

All corrections
JAR 8/10/90

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MELD84A

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium		486.96		90.45	B	400.0	99.1		P
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese		4085.79		1330.15		2600.0	106.0		P
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

U.S. EPA - CLP

6 A
DUPLICATES

EPA SAMPLE NO.

MELD84D

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 96.8 % Solids for Duplicate: 96.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		1087.8524		1050.1266		3.5		P
Antimony		3.5019	U	3.8261	U			P
Arsenic	1.9	3.3621		3.3238		1.1		F
Barium		15.8365	B	16.1473	B	1.9		P
Beryllium		0.1751	U	0.1913	U			P
Cadmium		0.8755	U	0.9565	U			P
Calcium		38480.4520		46967.4490		19.9		P
Chromium	1.8	4.7673		5.5802		15.7		P
Cobalt		2.7025	B	3.0214	B	11.1		P
Copper	4.4	7.4166		13.7528		59.9	*	P
Iron		5544.2185		7499.9895		30.0	*	P
Lead	0.6	116.4538		183.2555		44.6	*	F
Magnesium		13904.9120		20808.7950		39.8	*	P
Manganese		232.9020		287.3498		20.9	*	P
Mercury	0.1	0.0984	U	0.0984	U			CV
Nickel	7.0	6.4158	B	9.0716		34.3		P
Potassium		105.7571	U	115.5494	U			P
Selenium		0.5253	U	0.5739	U			F
Silver		0.5253	U	0.6852	B	200.0		P
Sodium		122.1309	B	136.0816	B	10.8		P
Thallium		0.1878	U	0.1797	U			F
Vanadium		5.2515	B	8.6106	B	48.5		P
Zinc		42.0165		63.9416		41.4	*	P
Cyanide		0.5114	U	0.5114	U			AC

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6B
DUPLICATES

EPA SAMPLE NO.

MELD89D

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		97.8466	B	73.2534	B	28.7		P
Antimony		20.0000	U	22.5969	B	200.0		P
Arsenic		8.5000	B	8.8000	B	3.5		F
Barium		150.4476	B	147.5541	B	1.9		P
Beryllium		1.0000	U	1.0000	U			P
Cadmium		5.0000	U	5.0000	U			P
Calcium		267533.0000		262912.6200		1.7		P
Chromium		5.0000	U	9.2007	B	200.0		P
Cobalt		2.0000	U	2.0000	U			P
Copper		6.0000	U	6.0000	U			P
Iron		6656.2666		6545.1191		1.7		P
Lead	3.0	13.1000		13.9000		5.9		F
Magnesium	5000.0	21712.0500		22175.0660		2.1		P
Manganese		846.5362		833.4886		1.6		P
Mercury		0.2000	U	0.2000	U			CV
Nickel		20.0000	U	20.0000	U			P
Potassium	5000.0	17273.5190		16923.9720		2.0		P
Selenium	5.0	3.3000 ~~12.6923~~	B	3300C ~~3.8095~~	B	~~107.70~~ 0	~~*~~	F
Silver		3.0000	U	3.0000	U			P
Sodium		26768.9180		26451.9430		1.2		P
Thallium		1.3000	B	1.2000 ~~1.0000~~	~~U~~ B	~~200.0~~ 8.0		F
Vanadium		2.0000	U	2.0000	U			P
Zinc	20.0	22.0287		22.9856		4.3		P
Cyanide		10.0000	U	10.0000	U			AC

All corrections
JAR 8/10/90

U.S. EPA - CLP

10 A

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

ICP ID Number: ICAP61 Date: 07/15/90

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.15		200.0	32.0	P
Antimony	217.58		60.0	20.0	P
Arsenic			10.0		
Barium	493.41		200.0	2.0	P
Beryllium	313.04		5.0	1.0	P
Cadmium	228.80		5.0	5.0	P
Calcium	317.93		5000.0	8.0	P
Chromium	267.72		10.0	5.0	P
Cobalt	228.62		50.0	2.0	P
Copper	324.75		25.0	6.0	P
Iron	259.94		100.0	49.0	P
Lead			3.0		
Magnesium	383.20		5000.0	534.0	P
Manganese	257.61		15.0	2.0	P
Mercury			0.2		
Nickel	231.60		40.0	20.0	P
Potassium	766.49		5000.0	604.0	P
Selenium			5.0		
Silver	328.07		10.0	3.0	P
Sodium	589.00		5000.0	107.0	P
Thallium			10.0		
Vanadium	292.40		50.0	2.0	P
Zinc	213.86		20.0	3.0	P

Comments:

U.S. EPA - CLP

10 B

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

ICP ID Number: Date: 07/15/90

Flame AA ID Number:

Furnace AA ID Number: PE_Z/3030

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			3.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium	196.09	BZ	5.0	3.0	F
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

U.S. EPA - CLP

10C

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

ICP ID Number: Date: 07/15/90

Flame AA ID Number:

Furnace AA ID Number: PE5100

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.31	BZ	3.0	1.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:
THALLIUM DETERMINED 7/16/90

U.S. EPA - CLP

10 D

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

ICP ID Number: Date: 07/15/90

Flame AA ID Number: PE5000

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			3.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury	253.70		0.2	0.2	CV
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

U.S. EPA - CLP

10 E

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

ICP ID Number: Date: 07/15/90

Flame AA ID Number:

Furnace AA ID Number: PE5100-B

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic	193.76	BZ	10.0	1.0	F
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			3.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium	276.79	BZ	10.0	1.0	F
Vanadium			50.0		
Zinc			20.0		

Comments:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 9.4.90

SUBJECT: Review of Region V CLP Data
Received for Review on Aug 1, 1990

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory Jay Thakker

Resubmittion

TO: Data User: FIT

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

SITE NAME: Texaco Inc. Salas, TE (IL) SMO case No. 14427

EPA Data Set No. _____ No. of Samples: 12 D.U./Activity Numbers _____

CRL No. _____

SMO Traffic No. MELD 82-87, 89-94

CLP Laboratory: WEYERHAEUSER _____ Hrs. Required for Review: 2 + ½ Audit

Following are our findings:

The laboratory's portion of case 14427 contains 6 low level soil and 6 low level water samples analyzed for total metals and total cyanides. This case was originally reviewed 8/10/90.

SOIL [MELD82-87]
As on MELD82, 84-87 was rerun by the lab, along with a duplicate and a spike. The new CCV recovery is acceptable. The new results affect the original narrative in that As results on MELD84-87 are now acceptable.

Se on MELD82 was rerun. The new IVC recovery is acceptable. Minor changes in the Se results are due to the lab correcting calculated results. All soil Se data remain qualified as in the original narrative.

WATER [MELD89-94]
Se results on Forms I, V, VI corrected by reviewer on resubmit as stated in original narrative.

Reviewed by: James Redlin James Redlin Date: 8/30/90

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

cc: Duane Geuder, Quality Assurance Officer, EPA Support Services
James Petty, Chief Quality Assurance Research, EMSL, Las Vegas

EPA FORM 1320-6 (Rev. 5/87)

U.S. EPA - CLP

1-A

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD82

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52285

Level (low/med): LOW Date Received: 06/27/90

% Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2170			P
7440-36-0	Antimony	4.0	U		P
7440-38-2	Arsenic	7.1			F
7440-39-3	Barium	94.5		N	P
7440-41-7	Beryllium	0.38	B		P
7440-43-9	Cadmium	4.0			P
7440-70-2	Calcium	30900			P
7440-47-3	Chromium	13.9			P
7440-48-4	Cobalt	4.1	B		P
7440-50-8	Copper	49.6		*	P
7439-89-6	Iron	16900		*	P
7439-92-1	Lead	348		*	F
7439-95-4	Magnesium	11300		*	P
7439-96-5	Manganese	319		N*	P
7439-97-6	Mercury	0.30			CV
7440-02-0	Nickel	9.0			P
7440-09-7	Potassium	122	U		P
7782-49-2	Selenium	0.61	U	NW	F
7440-22-4	Silver	1.7	B		P
7440-23-5	Sodium	196	B		P
7440-28-0	Thallium	0.69	B	NW	F
7440-62-2	Vanadium	8.2	B		P
7440-66-6	Zinc	427		E*	P
	Cyanide	0.54	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1-B

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD83

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52286

Level (low/med): LOW Date Received: 06/27/90

% Solids: 94.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	813			P
7440-36-0	Antimony	3.9	U		P
7440-38-2	Arsenic	3.2			F
7440-39-3	Barium	11.2	B	N	P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium	31900			P
7440-47-3	Chromium	2.9			P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	8.0		*	P
7439-89-6	Iron	4040		*	P
7439-92-1	Lead	23.2		*	F
7439-95-4	Magnesium	15000		*	P
7439-96-5	Manganese	173		N*	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	3.9	U		P
7440-09-7	Potassium	119	U		P
7782-49-2	Selenium	0.64	U	NW	F
7440-22-4	Silver	0.59	U		P
7440-23-5	Sodium	113	B		P
7440-28-0	Thallium	0.49	B	NW	F
7440-62-2	Vanadium	4.0	B		P
7440-66-6	Zinc	41.8		E*	P
	Cyanide	0.52	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1C

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD84

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52287

Level (low/med): LOW Date Received: 06/27/90

% Solids: 96.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1090			P
7440-36-0	Antimony	3.5	U		P
7440-38-2	Arsenic	3.6		S	F
7440-39-3	Barium	15.8	B	N	P
7440-41-7	Beryllium	0.18	U		P
7440-43-9	Cadmium	0.88	U		P
7440-70-2	Calcium	38500			P
7440-47-3	Chromium	4.8			P
7440-48-4	Cobalt	2.7	B		P
7440-50-8	Copper	7.4		*	P
7439-89-6	Iron	5540		*	P
7439-92-1	Lead	116		*	F
7439-95-4	Magnesium	13900		*	P
7439-96-5	Manganese	233		N*	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	6.4	B		P
7440-09-7	Potassium	106	U		P
7782-49-2	Selenium	0.56	U	NW	F
7440-22-4	Silver	0.53	U		P
7440-23-5	Sodium	122	B		P
7440-28-0	Thallium	0.19	U	N	F
7440-62-2	Vanadium	5.3	B		P
7440-66-6	Zinc	42.0		E*	P
	Cyanide	0.51	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1D

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD85

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52288

Level (low/med): LOW Date Received: 06/27/90

% Solids: 93.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3360			P
7440-36-0	Antimony	3.9	U		P
7440-38-2	Arsenic	4.3			F
7440-39-3	Barium	41.1		N	P
7440-41-7	Beryllium	0.22	B		P
7440-43-9	Cadmium	0.97	U		P
7440-70-2	Calcium	50500			P
7440-47-3	Chromium	10.1			P
7440-48-4	Cobalt	5.4	B		P
7440-50-8	Copper	12.9		*	P
7439-89-6	Iron	13000		*	P
7439-92-1	Lead	45.0		*	F
7439-95-4	Magnesium	24100		*	P
7439-96-5	Manganese	438		N*	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	9.2			P
7440-09-7	Potassium	176	B		P
7782-49-2	Selenium	0.61	U	NW	F
7440-22-4	Silver	1.2	B		P
7440-23-5	Sodium	214	B		P
7440-28-0	Thallium	0.47	B	NW	F
7440-62-2	Vanadium	11.9			P
7440-66-6	Zinc	76.6		E*	P
	Cyanide	0.54	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1-E

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD86

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52289

Level (low/med): LOW Date Received: 06/27/90

% Solids: 86.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2130			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	10.2		S	F
7440-39-3	Barium	59.9		N	P
7440-41-7	Beryllium	0.32	B		P
7440-43-9	Cadmium	2.8			P
7440-70-2	Calcium	39800			P
7440-47-3	Chromium	9.3			P
7440-48-4	Cobalt	4.2	B		P
7440-50-8	Copper	206		*	P
7439-89-6	Iron	12100		*	P
7439-92-1	Lead	339		*	F
7439-95-4	Magnesium	19300		*	P
7439-96-5	Manganese	285		N*	P
7439-97-6	Mercury	9.8			CV
7440-02-0	Nickel	9.6			P
7440-09-7	Potassium	116	U		P
7782-49-2	Selenium	0.54	U	NW	F
7440-22-4	Silver	1.5	B		P
7440-23-5	Sodium	190	B		P
7440-28-0	Thallium	0.20	B	NW	F
7440-62-2	Vanadium	8.1	B		P
7440-66-6	Zinc	286		E*	P
	Cyanide	0.57	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1-F

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD87

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Lab Sample ID: 52290

Level (low/med): LOW Date Received: 06/27/90

% Solids: 92.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4930			P
7440-36-0	Antimony	3.8	U		P
7440-38-2	Arsenic	8.3			F
7440-39-3	Barium	51.3		N	P
7440-41-7	Beryllium	0.39	B		P
7440-43-9	Cadmium	0.96	U		P
7440-70-2	Calcium	39600			P
7440-47-3	Chromium	13.2			P
7440-48-4	Cobalt	6.3	B		P
7440-50-8	Copper	19.9		*	P
7439-89-6	Iron	12000		*	P
7439-92-1	Lead	55.6		*	F
7439-95-4	Magnesium	16600		*	P
7439-96-5	Manganese	376		N*	P
7439-97-6	Mercury	0.15			CV
7440-02-0	Nickel	12.5			P
7440-09-7	Potassium	519	B		P
7782-49-2	Selenium	0.65	U	NW	F
7440-22-4	Silver	0.89	B		P
7440-23-5	Sodium	162	B		P
7440-28-0	Thallium	0.39	B	N	F
7440-62-2	Vanadium	12.0			P
7440-66-6	Zinc	112		E*	P
	Cyanide	0.53	U		AC

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: WHITE Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1 G

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MELD89

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Lab Sample ID: 52291

Level (low/med): LOW Date Received: 06/27/90

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	97.8	B		P
7440-36-0	Antimony	20.0	U		P
7440-38-2	Arsenic	8.5	B		F
7440-39-3	Barium	150	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	5.0	U		P
7440-70-2	Calcium	268000			P
7440-47-3	Chromium	5.0	U		P
7440-48-4	Cobalt	2.0	U		P
7440-50-8	Copper	6.0	U		P
7439-89-6	Iron	6660			P
7439-92-1	Lead	13.1			F
7439-95-4	Magnesium	21700			P
7439-96-5	Manganese	847			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	20.0	U		P
7440-09-7	Potassium	17300			P
7782-49-2	Selenium	3.3 ~~3.0~~	U	N~~*~~ W	F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	26800			P
7440-28-0	Thallium	1.3	B		F
7440-62-2	Vanadium	2.0	U		P
7440-66-6	Zinc	22.0			P
	Cyanide	10.0	U		AC

All corrections JAR 8/10/90

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

3 A
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	32.0	U	32.0	U	32.0	U	32.0	U	38.4	B	P
Antimony	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	P
Arsenic	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	F
Barium	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	P
Cadmium	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	P
Calcium	8.0	U	8.0	U	8.0	U	8.0	U	23.6	B	P
Chromium	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	P
Cobalt	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Copper	6.0	U	6.0	U	6.9	B	6.0	U	6.0	U	P
Iron	49.0	U	49.0	U	49.0	U	49.0	U	49.0	U	P
Lead	1.0	U	1.0	U	1.0	U			1.0	U	F
Magnesium	534.0	U	534.0	U	534.0	U	534.0	U	534.0	U	P
Manganese	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Mercury	0.2	U	0.2	U	0.2	U			0.2	U	CV
Nickel	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	P
Potassium	604.0	U	604.0	U	604.0	U	604.0	U	604.0	U	P
Selenium	3.0	U	3.0	U	3.0	U			3.0	U	F
Silver	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	P
Sodium	107.0	U	107.0	U	107.0	U	107.0	U	184.0	B	P
Thallium	1.0	U	1.8	B	1.9	B	1.0	U	1.0	U	F
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Zinc	3.0	U	3.0	U	4.7	B	3.0	U	3.0	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	AC

U.S. EPA - CLP

3 B
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum			32.0	U					15.794	B	P
Antimony			-21.8	B					-4.254	B	P
Arsenic									0.200	U	F
Barium			2.0	U					0.603	B	P
Beryllium			1.0	U					0.200	U	P
Cadmium			5.0	U					1.000	U	P
Calcium			8.0	U					5.582	B	P
Chromium			5.0	U					1.000	U	P
Cobalt			2.0	U					0.400	U	P
Copper			6.0	U					1.200	U	P
Iron			49.0	U					9.800	U	P
Lead									0.200	U	F
Magnesium			534.0	U					106.800	U	P
Manganese			2.0	U					0.400	U	P
Mercury									0.100	U	CV
Nickel			20.0	U					4.000	U	P
Potassium			604.0	U					120.800	U	P
Selenium									0.600	U	F
Silver			3.0	U					0.600	U	P
Sodium			107.0	U					60.774	B	P
Thallium			1.0	U	3.1	B			0.200	U	F
Vanadium			2.0	U					0.400	U	P
Zinc			3.0	U					1.174	B	P
Cyanide			10.0	U	10.0	U			0.500	U	AC

U.S. EPA - CLP

3C
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	32.0	U	32.0	U	32.0	U	32.0	U			P
Antimony	20.0	U	20.0	U	20.0	U	20.0	U			P
Arsenic	1.0	U	1.0	U							F
Barium	2.0	U	2.0	U	2.0	U	2.0	U			P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U			P
Cadmium	5.0	U	5.0	U	5.0	U	5.0	U			P
Calcium	8.0	U	8.0	U	8.0	U	8.0	U			P
Chromium	5.0	U	5.0	U	5.0	U	5.0	U			P
Cobalt	2.0	U	2.0	U	2.0	U	-2.4	B			P
Copper	6.0	U	6.0	U	6.0	U	6.0	U			P
Iron	49.0	U	49.0	U	49.0	U	49.0	U			P
Lead	1.0	U	1.0	U	1.0	U	1.0	U			F
Magnesium	534.0	U	534.0	U	534.0	U	534.0	U			P
Manganese	2.0	U	2.0	U	2.0	U	2.0	U			P
Mercury	0.2	U	0.2	U							CV
Nickel	20.0	U	20.0	U	20.0	U	20.0	U			P
Potassium	604.0	U	604.0	U	604.0	U	604.0	U			P
Selenium	3.0	U	3.0	U							F
Silver	3.0	U	3.0	U	3.0	U	3.0	U			P
Sodium	107.0	U	107.0	U	107.0	U	107.0	U			P
Thallium	-1.7	B	1.0	U							F
Vanadium	2.0	U	2.0	U	2.0	U	2.0	U			P
Zinc	3.0	U	3.0	U	3.0	U	3.0	U			P
Cyanide											

U.S. EPA - CLP

3 E
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic	1.0	U	2.3	B	1.0	U	1.0	U			F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium	3.0	U	3.0	U	3.0	U	3.0	U			F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

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3 F
BLANKS

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic			1.0	U	3.4	B	1.0	U			F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			3.0	U							F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

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5A A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MELD84S

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Level (low/med): LOW
% Solids for Sample: 96.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	86.1786		3.5019	U	97.46	88.4		P
Arsenic	75-125	11.0527		3.5647		8.02	93.4		F
Barium	75-125	528.2087		15.8365	B	389.83	131.4	N	P
Beryllium	75-125	8.3929		0.1751	U	9.75	86.1		P
Cadmium	75-125	8.3469		0.8755	U	9.75	85.6		P
Calcium									NR
Chromium	75-125	42.7320		4.7673		38.98	97.4		P
Cobalt	75-125	95.5460		2.7025	B	97.46	95.3		P
Copper	75-125	54.2162		7.4166		48.73	96.0		P
Iron									NR
Lead		275.8164		116.4538		4.01	3974.1		F
Magnesium									NR
Manganese	75-125	383.6085		232.9020		97.46	154.6	N	P
Mercury	75-125	0.5630		0.0984	U	0.52	108.3		CV
Nickel	75-125	94.0028		6.4158	B	97.46	89.9		P
Potassium									NR
Selenium	75-125	1.1835		0.5635	U	2.01	58.9	N	F
Silver	75-125	10.5339		0.5253	U	9.75	108.0		P
Sodium									NR
Thallium	75-125	7.0007		0.1878	U	10.03	69.8	N	F
Vanadium	75-125	104.7315		5.2515	B	97.46	102.1		P
Zinc	75-125	132.6000		42.0165		97.46	92.9		P
Cyanide	75-125	5.8813		0.5114	U	5.11	115.1		AC

Comments:

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5A B
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MELD89S

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Level (low/med): LOW
% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	1936.7759		97.8466	B	2000.00	91.9		P
Antimony	75-125	484.7377		20.0000	U	500.00	96.9		P
Arsenic	75-125	40.7000		8.5000	B	40.00	80.5		F
Barium	75-125	2071.4639		150.4476	B	2000.00	96.1		P
Beryllium	75-125	48.4343		1.0000	U	50.00	96.9		P
Cadmium	75-125	45.7243		5.0000	U	50.00	91.4		P
Calcium									NR
Chromium	75-125	191.9167		5.0000	U	200.00	96.0		P
Cobalt	75-125	469.3171		2.0000	U	500.00	93.9		P
Copper	75-125	243.1008		6.0000	U	250.00	97.2		P
Iron		7693.0947		6656.2666		1000.00	103.7		P
Lead	75-125	29.7000		13.1000		20.00	83.0		F
Magnesium									NR
Manganese	75-125	1314.2279		846.5362		500.00	93.5		P
Mercury	75-125	0.9100		0.2000	U	1.00	91.0		CV
Nickel	75-125	475.5420		20.0000	U	500.00	95.1		P
Potassium									NR
Selenium	75-125	7.8000		3.3000 ~~12.6923~~	B	10.00	45.0 ~~48.9~~	N	F
Silver	75-125	46.6079		3.0000	U	50.00	93.2		P
Sodium									NR
Thallium	75-125	43.9000		1.3000	B	50.00	85.2		F
Vanadium	75-125	483.7856		2.0000	U	500.00	96.8		P
Zinc	75-125	477.8771		22.0287		500.00	91.2		P
Cyanide	75-125	110.0000		10.0000	U	100.00	110.0		AC

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Comments:

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6 A
DUPLICATES

EPA SAMPLE NO.

MELD84D

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): SOIL Level (low/med): LOW

% Solids for Sample: 96.8 % Solids for Duplicate: 96.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		1087.8524		1050.1266		3.5		P
Antimony		3.5019	U	3.8261	U			P
Arsenic	1.9	3.5647		3.8448		7.6		F
Barium		15.8365	B	16.1473	B	1.9		P
Beryllium		0.1751	U	0.1913	U			P
Cadmium		0.8755	U	0.9565	U			P
Calcium		38480.4520		46967.4490		19.9		P
Chromium	1.8	4.7673		5.5802		15.7		P
Cobalt		2.7025	B	3.0214	B	11.1		P
Copper	4.4	7.4166		13.7528		59.9	*	P
Iron		5544.2185		7499.9895		30.0	*	P
Lead		116.4538		183.2555		44.6	*	F
Magnesium		13904.9120		20808.7950		39.8	*	P
Manganese		232.9020		287.3498		20.9	*	P
Mercury	0.1	0.0984	U	0.0984	U			CV
Nickel	7.0	6.4158	B	9.0716		34.3		P
Potassium		105.7571	U	115.5494	U			P
Selenium		0.5635	U	0.5390	U			F
Silver		0.5253	U	0.6852	B	200.0		P
Sodium		122.1309	B	136.0816	B	10.8		P
Thallium		0.1878	U	0.1797	U			F
Vanadium		5.2515	B	8.6106	B	48.5		P
Zinc		42.0165		63.9416		41.4	*	P
Cyanide		0.5114	U	0.5114	U			AC

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6B
DUPLICATES

EPA SAMPLE NO.

MELD89D

Lab Name: WEYERHAEUSER COMPANY Contract: 68-D9-0080

Lab Code: WEYER Case No.: 14427 SAS No.: SDG No.: MELD82

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		97.8466	B	73.2534	B	28.7		P
Antimony		20.0000	U	22.5969	B	200.0		P
Arsenic		8.5000	B	8.8000	B	3.5		F
Barium		150.4476	B	147.5541	B	1.9		P
Beryllium		1.0000	U	1.0000	U			P
Cadmium		5.0000	U	5.0000	U			P
Calcium		267533.0000		262912.6200		1.7		P
Chromium		5.0000	U	9.2007	B	200.0		P
Cobalt		2.0000	U	2.0000	U			P
Copper		6.0000	U	6.0000	U			P
Iron		6656.2666		6545.1191		1.7		P
Lead	3.0	13.1000		13.9000		5.9		F
Magnesium	5000.0	21712.0500		22175.0660		2.1		P
Manganese		846.5362		833.4886		1.6		P
Mercury		0.2000	U	0.2000	U			CV
Nickel		20.0000	U	20.0000	U			P
Potassium	5000.0	17273.5190		16923.9720		2.0		P
Selenium	5.0	3.3000 ~~3.0000~~	~~U~~ B	3.3000 ~~9.6875~~	B	~~200.000~~ *		F
Silver		3.0000	U	3.0000	U			P
Sodium		26768.9180		26451.9430		1.2		P
Thallium		1.3000	B	1.2000	B	8.0		F
Vanadium		2.0000	U	2.0000	U			P
Zinc	20.0	22.0287		22.9856		4.3		P
Cyanide		10.0000	U	10.0000	U			AC

JAR 8/30/90

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

CRL Receipt Date 7/23/90 FIT Receipt Date 8/7/90 Review Completed 8/17/90

TO: D. Sullivan
FROM: C. Kouris
SUBJECT: Texaco Inc.
PAN: IL0602 (1 hour charged for review) Case # 14427

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
# 6	Low Soil	#	Low Soil
	Low Water		Low Water
	Drinking Water		Drinking Water
	Other		Other

Project Data Status _____ Completed!!

X Incomplete, awaiting Org low Water

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 6/26/90

0759:2

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Table 4-__
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED _____ SAMPLES

CK 8/17/90

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	S1	S2	S3	S4	S5	S6	7	8	9	10	11	12
				Date												
				Time												
				Well Depth (Feet)												
				CRL Log Number												
				CLP Organic Traffic Report Number	ELQ 92	ELQ 93	ELQ 94	ELQ 95	ELQ 96	ELQ 97						
				CLP Inorganic Traffic Report Number												
				Temperature (°C)												
				Specific Conductivity (µmhos/cm)												
				pH												
				Compound Detected (values in µg/L or µg/kg)												
				Volatile Organics												
Gas	A,D,G,I	OCC	HH	chloromethane												
Gas	A,D,G,I	OCC	HH	bromomethane												
Gas	A,D,G,I	OCC	HH	vinyl chloride												
Gas	A,D,G,I	OCC	HH	chloroethane												
Liquid	A,D,H,I	SOL	HH,CLA	methylene chloride					45J							
Liquid	E,H,I,A	SOL	K,CLA	acetone												
Liquid	A,H,I	SOL	SH	carbon disulfide	2J											
Liquid	A,D,G,I	SOL	HH	1,1-dichloroethene												
Liquid	A,D,H,G	SOL	HH	1,1-dichloroethane												
Liquid	A,D,G	SOL	HH	1,2-dichloroethene (total)												
Liquid	A,D	SOL	HH	chloroform												
Liquid	A,D,G	SOL	HH	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)												
Liquid	A,D	SOL	HH	1,1,1-trichloroethane												
Liquid	A,D	SOL	HH	carbon tetrachloride												
Liquid	A,D,G	SOL	HYD	vinyl acetate												
Liquid	A,D	OCC	HH	bromodichloromethane												
Liquid	A,D,G	SOL	HH	1,2-dichloropropane												
Liquid	A,D,G	SOL	HH	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	HH	trichloroethene												
Liquid	A,D	OCC	HH	dibromochloromethane												
Liquid	A,D	SOL	HH	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	HH	trans-1,3-dichloropropene												
Liquid	A,D	SOL	HH,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	HH	tetrachloroethene												
Liquid	A,G,E	SOL	A,CLA	toluene	2J				2J							
Liquid	A,D,E	SOL	HH	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	HA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene												
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)												

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	7	8	9	10	11	12
				Semivolatile Organics												
S, thick 1	A,B,E	OCC	P	phenol												
Liquid	A,D,B	OCC	HH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,H	SOL	HA	1,3-dichlorobenzene												
Solid	A,D,H	OCC	HA	1,4-dichlorobenzene												
Liquid	A,D,H	SOL	A	benzyl alcohol												
Liquid	A,D,H	OCC	HA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
	A,D	OCC	HH	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	H-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	HH	hexachloroethane												
Liquid	A,D	OCC	HA	nitrobenzene												
Liquid	A,D	OCC	H	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	HH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	HA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene					62J							
Solid	A,D	OCC	HH	4-chloroaniline												
Liquid	A,D,B	OCC	HH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene	59J			79J	62J							
Liquid	A,D,B	OCC	HH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	NH	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	HA	2,6-dinitrotoluene												
Solid	A,D	OCC	NH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene	50J											
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran	45J											
Solid	A,D	OCC	HA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	HH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene	62J											
Solid	A,D,E	OCC	NH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	NH	n-nitrosodiphenylamine												
Liquid	A,D	OCC	HH	4-bromophenyl-phenylether												
Solid	A,D	OCC	HA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene	720					120J						

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	7	8	9	10	11	12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene	150J											
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate	510	54J	51J			52J						
Solid	A,D	OCC	PAH	fluoranthene	1400		42J			370						
Solid	A,D	OCC	PAH	pyrene	1000		41J			280J						
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	HA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene	1000					430						
Solid	A,D	OCC	PAH	chrysene	990					230J						
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate					41J	47J						
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo[b]fluoranthene	740					430X						
Solid	A,D	OCC	PAH	benzo[k]fluoranthene	670					430X						
Solid	A,D,K,L	OCC	PAH	benzo[a]pyrene	870					210J						
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene	420					180J						
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene	250J					58J						
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene	410					210J						
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Mariate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

Table 4- (Cont.)

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
J	Indicates an estimated value.	Compound value may be semiquantitative.
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µL in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS		DEFINITION	INTERPRETATION
E	E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	S	Analysis by Method of Standard Additions.	Value is quantitative.
R	N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ		DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J		Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
U	U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
	M	Duplicate injection precision not met.	Value may be semiquantitative.
	W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
	R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 8/2/90

8/7/90

SUBJECT: Review of Region V CLP Data
Received for Review on July 23, 1990

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

TO: Data User: FIT

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

SITE NAME: TEXACO, INC. S.T. 33083 (IL) SMO Case No. 14427

EPA Data Set No. (1) No. of Samples: 6 D.U./Activity Numbers 1

CRL No.

SMO Traffic No. ELQ92-97

CLP Laboratory: COMPUCHEM Hrs. Required for Review: 5.0 +2 = 7

Following are our findings.

Six (6) soil samples were determined for low-level volatile organics, semivolatile organics, and pesticides/PCB's. All the volatile organics results are estimated because of holding time exceedance; otherwise most QC problems with this set of samples are relatively minor.

The reviewer's narrative and data qualifiers follow.

Ronald J. Zanger

Ronald J. Zanger

Roy F. Weston, Inc.

1 August 1990

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

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

DPO: [ ] ACTION [ ] FYI REGION V

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 14427 LABORATORY Compuchem

SDG NO(s). ELQ 92 DATA USER FIT

SOW _____ REVIEW COMPLETION DATE 31 July 1990

NO. OF SAMPLES Six (6) MATRIX Soil (SPECIFY WATER, SOIL, OR OTHER)

REVIEWER [ ] ESD [X] ESAT [X] OTHER, CONTRACT/CONTRACTOR [signature]

IS LABORATORY CERTIFICATION STATEMENT SIGNED? [ ] YES [ ] NO

IS DATA PACKAGE CONSISTENT WITH THE LABORATORY'S CERTIFIED NARRATIVE? [ ] YES [ ] NO

	VOA	BNA	PEST	OTHER
1. HOLDING TIMES	M	O	O	
2. GC-MS TUNE/ GC PERFORMANCE	O	O	O	
3. INITIAL CALIBRATIONS	O	O	O	
4. CONTINUING CALIBRATIONS	M	X	O	
5. FIELD BLANKS ("F" = not applicable)	F	F	F	
6. LABORATORY BLANKS	O	O	O	
7. SURROGATES	O	O	O	
8. MS/MSD	O	O	O	
9. REGIONAL QC ("F" = not applicable)	F	F	F	
10. INTERNAL STANDARDS	O	O		
11. COMPOUND IDENTIFICATION	O	O	O	
12. COMPOUND QUANTITATION	O	O	O	
13. SYSTEM PERFORMANCE	O	O		

O = No problems or minor problems that do not affect data usability.
X = No more than *about* 5% of the data points are qualified as either estimated or unusable.
M = More than *about* 5% of the data points are qualified as estimated.
Z = More than *about* 5% of the data points are qualified as unusable.
A = Used *in conjunction with* above codes to indicate that item requires DPO action.

DPO ACTION ITEMS: _____

AREAS OF CONCERN: Missed volatiles holding time - all results estimated. Excessive volatiles calibration outliers.

DATA QUALIFIERS

Contractor: COMPU

Case/SAS number: 14427

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(1) Holding Times:

The Organic Traffic Report lists the date of collection as 26 June, 1990, for all samples.

All volatile organics samples were analyzed after the seven-day limit for the analysis of volatile organics in soil samples. All volatile organics results are estimated, "J" or "UJ", for positive and negative results, respectively.

All semivolatile organics and pesticide/PCB samples were extracted within the fourteen-day limit for the extraction of semivolatile organics and pesticides/PCB's in soil samples, and all semivolatile organics and pesticide/PCB extracts were analyzed within the forty-day limit for the analysis of extracts. No problems indicated.

(2) GC/MS Tuning and Mass Calibration:

All GC/MS ion abundance and percent relative abundance criteria were met, both in the bromofluorobenzene tunes for volatile organics analysis and in the decafluorotriphenylphosphine tunes for semivolatile organics analysis. No problems indicated.

(3) Calibration:

GC/MS calibration outliers are listed on the attached forms.

(4) Method Blanks:

The volatile organics method blank VBLKQ1 was reported to contain methylene chloride, acetone, 2-butanone, and one TIC compound, affecting samples ELQ92, ELQ94, ELQ95, ELQ87, ELQ92MS, and ELQ92MSD. The volatile organics method blank VBLKC4 was reported to contain acetone, affecting sample ELQ96. The volatile organics method blank VBLKB7 was reported to contain methylene chloride and acetone, affecting sample ELQ93.

The semivolatile organics method blank and both pesticide/PCB method blanks were reported to be free of contamination.

Affected samples containing an amount of methylene chloride, acetone, or 2-butanone less than, or equal to, ten times the amount in the associated method blank are qualified "U", undetected, for that compound in that sample. Affected samples containing an amount of any other compound less than, or equal to, five times the amount in the associated method blank are qualified "U", undetected, for that compound in that sample.

Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 31 July 1990

ETE
1 Aug 90

DATA QUALIFIERS

Contractor: COMPU

Case/SAS number: 14427

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(5) Surrogate Spike Recoveries:

All volatile organics, semivolatile organics, and pesticide/PCB surrogate spike recoveries met contract-required QC limits. No problems indicated.

(6) Matrix Spike/Matrix Spike Duplicate Recoveries:

Sample ELQ92 was used for the volatile organics and semivolatile organics matrix spikes. Sample ELQ93 was used for the pesticide/PCB matrix spikes.

All volatile organics, semivolatile organics, and pesticide/PCB matrix spikes, duplicates, and their associated RPD's were within advisory QC limits. No problems indicated.

(7) Field Blanks and Field Duplicate Samples:

No field blanks or field duplicate samples were included in this sample set.

(8) Internal Standards:

All volatile organics and semivolatile organics internal standards met the -50%/+100% criterion for internal standard area counts, as well as the +/- 30-second criterion for internal standard retention time variation. No problems indicated.

Pesticides/PCB's:

In the evaluation checks for linearity, %RSD was within the 10% limit for each compound for both the primary quantitation and secondary confirmation columns. Combined Endrin and 4,4'-DDT degradation was within the 20% limit for both columns. Dibutylchlorendate retention time variation was within the 2.0% limit required for packed columns, for each injection, for both columns. The Individual Standards "A" and "B" were within the 15% limit for each compound, for both columns. No problems indicated.

(9) Compound Quantitation and Reported Detection Limits:

A survey of the positive results reveal no errors in calculation in any fraction. Comparisons of chromatograms of positives with the results indicate that the positive results reported, of which there were very few, are at least in the correct range. The moisture content of each sample appears to have been correctly factored into the positive and negative results. No problems indicated.

Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 31 July 1990

RJZ
1 Aug 90

DATA QUALIFIERS

Contractor: COMPU

Case/SAS number: 14427

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(10) Other Case-Specific Problems:

With the exception of the missed holding times for the volatile organics samples, there were very few problems overall with this set of samples. Nevertheless, the reviewer feels that it is necessary to point out that this particular contract lab, true to its errors, insists on the reverse pagination of its data packages, which is opposite the convention in the remainder of western civilization.

Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 31 July 1990

CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 14427 CONTRACTOR Compu

Instrument # 12	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6/29/90 15:25			7/4/90 13:13			7/6/90 9:37			-					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane	0.601			0.451	25.0	J	0.484								
Bromomethane															
Vinyl Chloride															
Chloroethane							1.850								
Methylene Chloride	0.0071	47.2	J	1.337	33.4	J	~~0.481~~	~~38.0~~	~~J~~	RJE	31 July 90				
Acetone	0.776	54.4	J	0.388	50.0	J	0.481	38.0	J						
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone	0.223	31.4	J	0.169											
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate	0.652			0.550			0.487	25.3	J						
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane	0.506			0.733	52.8	J	0.919	81.6	J						
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform	0.332			0.430	29.5	J	0.470	41.6	J						
4-Methyl-2-Pentanone															
2-Hexanone	0.326			0.436	33.7	J	0.478	46.6	J						
Tetrachloroethene	0.547			0.583			0.743	35.8	J						
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

VBLKQ1	VBLKC4
ELQ92	ELQ96
ELQ92MS	
ELQ92MSD	
ELQ94	
ELQ95	
ELQ97	

Reviewer's Initials/Date: RJE 1 Aug '90

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 14427 CONTRACTOR Compu

Instrument # 11	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	7/6/90 13:42			7/6/90 15:10											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane															
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride	2.955	36.6	J	2.668											
Acetone	0.835	59.9	J	0.534	36.0	J									
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone	0.183	46.2	J	0.152											
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate															
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform															
4-Methyl-2-Pentanone	0.529	33.5	J	0.432											
2-Hexanone															
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

VBLKB7
ELQ93

Reviewer's Initials/Date: RJZ
1 Aug 90

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
SEMIVOLATILE MSL COMPOUNDS
(Page 1)

CASE/SAS # 14427 CONTRACTOR COMPU

Instrument # 20	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6/30/90 14:00			6/30/90 16:11			7/1/90 8:56			7/2/90 2:18					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
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															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid	0.125			0.127			0.161	28.8	J	0.160	28.0	J			
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline	0.395			0.299			0.295	25.3	J	0.291	26.3	J			
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol								--							
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline															
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline															
Acenaphthene															
2,4-Dinitrophenol															
4-Nitrophenol	0.257			0.299			0.329	28.0	J	0.322	27.6	J			
Dibenzofuran															

AFFECTED SAMPLES:

SBLK01	ELQ 92	ELQ 92 MS
	ELQ 93	ELQ 92 MSD
	ELQ 94	
	ELQ 95	
	ELQ 96	
	ELQ 97	

Reviewer Initials/Date: RJZ 1 Aug 90

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE/SAS # 14427 CONTRACTOR COMPU

Instrument # 20	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6/30/90 14:00			6/30/90 16:11			7/1/90 8:56			7/2/90 2:18					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene		-													
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline	0.178			0.226	27.0	J	0.144			0.197					
4,6-Dinitro-2-Methylphenol															
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene															
Pentachlorophenol															
Phenanthrene															
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene															
Butylbenzylphthalate															
Benzo(a)Anthracene															
bis(2-Ethylhexyl)Phthalate															
Chrysene															
Di-n-Octyl Phthalate															
Benzo(b)Fluoranthene															
Benzo(k)Fluoranthene															
Benzo(a)Pyrene															
Indeno(1,2,3-cd)Pyrene															
Dibenz(a,h)Anthracene															
Benzo(g,h,i) Perylene															

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: RJZ 1 Aug '90

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result 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 but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} = 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

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 indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract shall be confirmed by GC/MS.

2

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - 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 Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

984

14427 EL092 SAMPLES DATA PACKAGE

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number: 14427

SAS No. (if applicable):

1. Sample Description (Enter in Column A)
1. Surface Water
2. Ground Water
3. Leachate
4. Rinsate
5. Soil/Sediment
6. Oil (SAS)
7. Waste (SAS)
8. Other (SAS) (Specify)

IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.

2. Region Number: V
Sampling Co.: FIT
Sampler (Name): Michael Phillips
3. Ship To: CompuChem Labs 3308 Chapel Hill RTP, NC 27709 attn Natalie Carter

4. Date Shipped: 6/26/90
Carrier: F
Airbill Number: 2375419833
Triple volume required for matrix spike/duplicate aqueous sample.
Ship medium and high concentration samples in paint cans.
See reverse for additional instructions.

5. Date Received: 6/27/90
Received by: V. Bott
Laboratory Contract Number: 68-D9-0032
Unit Price: 797.00
6. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Number (From labels)	(A) Sample Description (From box 1)	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA	BNA	Pest/PCB	ARO/TOX	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number	(H) Sample Condition on Receipt	(I) High Conc. Phases (Check below) Solid	Water—MIS Liq.	Non Water—MIS Liq.
ELQ92	5	L	X	X	X			S1	6/26/90 1140	MELD82	350878			
ELQ93	5	L	X	X	X			S2	6/26/90 1210	MELD83	350879			
ELQ94	5	L	X	X	X			S3	6/26/90 1345	MELD84	350886			
ELQ95	5	L	X	X	X			S4	6/26/90 1605	MELD85	350890			
ELQ96	5	L	X	X	X			S5	6/26/90 1610	MELD86	350891			
ELQ97	5	L	X	X	X			S6	6/26/90 1654	MELD87	350892			
ELR94	2	L	X	X	X		MSD	MW1	6/26/90 1445	MELD89	350874			
ELR95	2	L	X	X	X			MW2	6/26/90 1600	MELD90	350895			
ELR96	2	L	X	X	X			MW3	6/26/90 1700	MELD91	350896			
~~Shipment is not complete~~										~~MLP 6/26/90~~				
ELR97	4	L	X	X	X		BLANK	BLK	6/26/90 1630	MELD92	350877			
ELQ98	2	L	X	X	X			DUP	6/26/90 1600	MELD93	350863			
ELQ99	2	L	X	X	X			MW4	6/26/90 1730	MELD94	350867			

Shipment is complete

RECEIVED IN GOOD CONDITION 6/27/90

EPA Form 9110.2 (11-89) Replaces EPA Form 2075-7 which may be used. Blue - Region Copy Pink - SMO Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

COMPUCHEM LABORATORIES

RECEIVED
JUL 2 1990
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Case Narrative #14427
SDG #ELQ92 SAS #5169HQ
Contract #68-D9-0032
CompuChem Laboratories, Inc.

SAMPLE IDENTIFICATIONS: ELQ92, ELQ93, ELQ94, ELQ95, ELQ96, ELQ97

These solid samples were received June 27, 1990 in good condition, with the proper Traffic Report (TR), sealed in a cooler. Analyses were scheduled in accordance with the TR. Volatile, semivolatile, and pesticide analyses were performed as requested on these samples. Holding time requirements were met for all of these samples.

All pertinent Quality Assurance and Laboratory notices for CASE# 14427, SDG# ELQ92 SAS# 5169HQ are included in the sample data package.

VOLATILES:

There were volatile Target Compound List analytes identified above the Contract Required Quantitation Limits in all of these samples. Tentatively Identified Compounds were found in two of these samples.

The associated method blanks and duplicate matrix spikes met all quality control requirements.

SEMIVOLATILES:

There were semivolatile Target Compound List analytes identified above the Contract Required Quantitation Limits in two of these samples. Tentatively Identified Compounds were found in all of these samples.

The "X" flag is used to denote analytes that coelute as indistinguishable isomers.

The associated method blanks and duplicate matrix spikes met all quality control requirements.

PESTICIDES:

There were no pesticide Target Compound List analytes identified above the Contract Required Quantitation Limits in these samples. The pesticide advisory surrogate standard was acceptable in all of these samples.

The associated method blank and duplicate matrix spike met all quality control requirements.

COMPUCHEM LABORATORIES

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package and in the computer-readable data submitted on the floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Daniel Boone 07/20/90

Daniel E. Boone, Jr. DATE 07/20/90
TECHNICAL REVIEWER

Note: This report is paginated for reference and accountability in decreasing numerical sequence.

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	ELQ92	105	103	112	0	0
02	ELQ93	87	75	91	0	0
03	ELQ94	102	99	108	0	0
04	ELQ95	97	92	104	0	0
05	ELQ96	98	92	106	0	0
06	ELQ97	106	98	112	0	0
07	ELQ92MS	116	101	112	0	0
08	ELQ92MSD	115	111	115	0	0
09	VBLKQ1	102	100	109	0	0
10	VBLKC4	105	98	116	0	0
11	VBLKB7	102	88	99	0	0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(81-117)
S2 (BFB)	= Bromofluorobenzene	(74-121)
S3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	ELQ92	73	80	62	73	76	79	0	0
02	ELQ93	74	86	87	75	81	65	0	0
03	ELQ94	71	78	84	71	78	67	0	0
04	ELQ95	69	73	71	69	70	74	0	0
05	ELQ96	70	76	73	72	74	63	0	0
06	ELQ97	71	67	71	69	72	57	0	0
07	ELQ92MS	71	66	79	71	65	60	0	0
08	ELQ92MSD	74	65	78	73	69	62	0	0
09	SBLK01	85	82	85	89	95	69	0	0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	PBLK74	56	0
02	ELQ93MS	56	0
03	ELQ93MSD	51	0
04	PBLK70	84	0
05	ELQ92	92	0
06	ELQ93	96	0
07	ELQ94	104	0
08	ELQ95	96	0
09	ELQ96	92	0
10	ELQ97	93	0
11			
12			
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30			

ADVISORY QC LIMITS (20-150)

S1 (DBC) = Dibutylchlorendate

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

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FORM II PEST-2 1/87 Rev.

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix Spike - EPA Sample No.: ELQ92 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	58.1	0	63.1	109	59-172
Trichloroethene	58.1	0	58.7	101	62-137
Benzene	58.1	0	65.1	112	66-142
Toluene	58.1	1.83	65.7	110	59-139
Chlorobenzene	58.1	0	60.2	104	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	58.1	59.2	102	7	22	59-172
Trichloroethene	58.1	59.3	102	-1	24	62-137
Benzene	58.1	65.0	112	0	21	66-142
Toluene	58.1	65.3	109	1	21	59-139
Chlorobenzene	58.1	61.0	105	-1	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP ,14427,ELQ92,ELQ92,LOW,SOIL,350878,VOLATILE,EPA,
CAP, GT900704C12,BG900704C12, , , ,

FORM III VOA-2 1/87 Rev.

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix Spike - EPA Sample No.: ELQ92 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	7740	0	4840	63	26- 90
2-Chlorophenol	7740	0	5810	75	25-102
1,4-Dichlorobenzene	3870	0	2250	58	28 104
N-Nitroso-di-n-prop.(1)	3870	0	3220	83	41 126
1,2,4-Trichlorobenzene	3870	0	2700	70	38 107
4-Chloro-3-methylphenol	7740	0	6200	80	26 103
Acenaphthene	3870	50.3	2870	73	31-137
4-Nitrophenol	7740	0	3660	47	11-114
2,4-Dinitrotoluene	3870	0	2320	60	28- 89
Pentachlorophenol	7740	0	5230	68	17-109
Pyrene	3870	995	4800	98	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	7740	5070	66	-5	35	26- 90
2-Chlorophenol	7740	5690	74	1	50	25-102
1,4-Dichlorobenzene	3870	2230	58	0	27	28 104
N-Nitroso-di-n-prop.(1)	3870	3330	86	-4	38	41 126
1,2,4-Trichlorobenzene	3870	2570	66	6	23	38 107
4-Chloro-3-methylphenol	7740	5960	77	4	33	26 103
Acenaphthene	3870	2660	67	9	19	31-137
4-Nitrophenol	7740	3840	50	-6	50	11-114
2,4-Dinitrotoluene	3870	2370	61	-2	47	28- 89
Pentachlorophenol	7740	5000	65	5	47	17-109
Pyrene	3870	4530	91	7	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: CLP ,14427,ELQ92,ELQ92,LOW,SOIL,350878,BNA,EPA,
CAP, HH900701A20,DF900701A20, , , ,

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3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix Spike - EPA Sample No.: ELQ93 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	27.120	0.000	16.900	62	46-127
Heptachlor	27.120	0.000	18.000	66	35-130
Aldrin	27.120	0.000	18.500	68	34-132
Dieldrin	67.801	0.000	44.500	66	31-134
Endrin	67.801	0.000	72.700	107	42-139
4,4'-DDT	67.801	0.000	53.800	79	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	27.120	15.400	57	8	50	46-127
Heptachlor	27.120	16.300	60	10	31	35-130
Aldrin	27.120	16.800	62	9	43	34-132
Dieldrin	67.801	40.600	60	10	38	31-134
Endrin	67.801	63.400	94	13	45	42-139
4,4'-DDT	67.801	49.500	73	8	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

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4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Lab File ID: GH051646A12 Lab Sample ID: VBLK01

Date Analyzed: 07/04/90 Time Analyzed: 0740

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 12

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ELQ92	350878	GH050878A12	0828
02	ELQ94	350886	GH050886A12	1122
03	ELQ95	350890	GH050890A12	1157
04	ELQ97	350892	GH050892A12	1313
05	ELQ92MS	350883	GH050883A12	0933
06	ELQ92MSD	350884	GH050884A12	1026

COMMENTS: CLP , , , ,LOW, ,351646,VOLATILE,BLANK,
CAP, GT900704C12,BG900704C12, , , ,

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FORM IV VOA 1/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Lab File ID: GH053157A12 Lab Sample ID: VBLKC4

Date Analyzed: 07/06/90 Time Analyzed: 1200

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 12

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ELQ96	350891	GR050891A12	1431

COMMENTS: CLP , , , ,LOW, ,353157,VOLATILE,BLANK,
CAP, GS900706A12,BF900706A12, , , ,

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Lab File ID: GH052819B11 Lab Sample ID: VBLKB7

Date Analyzed: 07/06/90 Time Analyzed: 1600

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ELQ93	350879	GR050879B11	1747

COMMENTS: CLP , , , ,LOW, ,352819,VOLATILE,BLANK,
CAP, GY900706A11,BI900706A11, , , ,

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Lab File ID: GH051168A20 Lab Sample ID: SBLK01

Date Extracted: 06/28/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 06/30/90 Time Analyzed: 2215

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 20

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	ELQ92	350878	GH050878A20	07/01/90
02	ELQ93	350879	GH050879A20	07/01/90
03	ELQ94	350886	GH050886A20	07/01/90
04	ELQ95	350890	GH050890A20	07/01/90
05	ELQ96	350891	GH050891A20	07/01/90
06	ELQ97	350892	GH050892A20	07/01/90
07	ELQ92MS	350880	GH050880C20	07/02/90
08	ELQ92MSD	350881	GH050881C20	07/02/90

COMMENTS: CLP , , , ,LOW, ,351168,BNA,BLANK,
CAP, HH900630B20,DH900630A20, , , ,

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4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Lab Sample ID: 351314 Lab File ID: _____

Matrix:(soil/water) SOIL Level:(low/med) LOW

Date Extracted: 06/28/90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 07/10/90 Date Analyzed (2): _____

Time Analyzed (1): 1055 Time Analyzed (2): _____

Instrument ID (1): 05 Instrument ID (2): _____

GC Column ID (1): 2250/2401 GC Column ID (2): _____

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ELQ93MS	350887	07/10/90	
02	ELQ93MSD	350888	07/10/90	
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
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23				
24				
25				
26				

COMMENTS: _____

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4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Lab Sample ID: 351168 Lab File ID: _____

Matrix:(soil/water) SOIL Level:(low/med) LOW

Date Extracted: 06/28/90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 07/10/90 Date Analyzed (2): 07/16/90

Time Analyzed (1): 2218 Time Analyzed (2): 1247

Instrument ID (1): 07 Instrument ID (2): 30

GC Column ID (1): 2250/2401 GC Column ID (2): RTX1701

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ELQ92	350878	07/10/90	07/16/90
02	ELQ93	350879	07/11/90	
03	ELQ94	350886	07/11/90	07/16/90
04	ELQ95	350890	07/11/90	07/16/90
05	ELQ96	350891	07/11/90	07/16/90
06	ELQ97	350892		07/17/90
07				
08				
09				
10				
11				
12				
13				
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26				

COMMENTS: _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKQ1

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: VBLKQ1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH051646A12

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/04/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	2	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKQ1

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: VBLKQ1

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH051646A12

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/04/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LAB. ARTIFACT	0.80	8.0	J

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC4

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: VBLKC4

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH053157A12

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	19	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKC4

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: VBLKC4

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH053157A12

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKB7

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: VBLKB7

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH052819B11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	7	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKB7

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: VBLKB7

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH052819B11

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: SBLK01

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH051168A20

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/30/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl Alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
39638-32-9	bis(2-Chloroisopropyl)Ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: SBLK01

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH051168A20

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/30/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3	Dibenz(a,h)Anthracene	330	U
191-24-2	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK01

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: SBLK01

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH051168A20

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 06/30/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SV-TIC 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK74

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 351314

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.0	U
319-85-7	beta-BHC	8.0	U
319-86-8	delta-BHC	8.0	U
58-89-9	gamma-BHC (Lindane)	8.0	U
76-44-8	Heptachlor	8.0	U
309-00-2	Aldrin	8.0	U
1024-57-3	Heptachlor epoxide	8.0	U
959-98-8	Endosulfan I	8.0	U
60-57-1	Dieldrin	16.	U
72-55-9	4,4'-DDE	16.	U
72-20-8	Endrin	16.	U
33213-65-9	Endosulfan II	16.	U
72-54-8	4,4'-DDD	16.	U
1031-07-8	Endosulfan sulfate	16.	U
50-29-3	4,4'-DDT	16.	U
72-43-5	Methoxychlor	80.	U
53494-70-5	Endrin ketone	16.	U
5103-71-9	alpha-Chlordane	80.	U
5103-74-2	gamma-Chlordane	80.	U
8001-35-2	Toxaphene	160	U
12674-11-2	Aroclor-1016	80.	U
11104-28-2	Aroclor-1221	80.	U
11141-16-5	Aroclor-1232	80.	U
53469-21-9	Aroclor-1242	80.	U
12672-29-6	Aroclor-1248	80.	U
11097-69-1	Aroclor-1254	160	U
11096-82-5	Aroclor-1260	160	U

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK70

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 351168

Sample wt/vol: 30.2 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	7.9	U
319-85-7	beta-BHC	7.9	U
319-86-8	delta-BHC	7.9	U
58-89-9	gamma-BHC (Lindane)	7.9	U
76-44-8	Heptachlor	7.9	U
309-00-2	Aldrin	7.9	U
1024-57-3	Heptachlor epoxide	7.9	U
959-98-8	Endosulfan I	7.9	U
60-57-1	Dieldrin	16.	U
72-55-9	4,4'-DDE	16.	U
72-20-8	Endrin	16.	U
33213-65-9	Endosulfan II	16.	U
72-54-8	4,4'-DDD	16.	U
1031-07-8	Endosulfan sulfate	16.	U
50-29-3	4,4'-DDT	16.	U
72-43-5	Methoxychlor	79.	U
53494-70-5	Endrin ketone	16.	U
5103-71-9	alpha-Chlordane	79.	U
5103-74-2	gamma-Chlordane	79.	U
8001-35-2	Toxaphene	160	U
12674-11-2	Aroclor-1016	79.	U
11104-28-2	Aroclor-1221	79.	U
11141-16-5	Aroclor-1232	79.	U
53469-21-9	Aroclor-1242	79.	U
12672-29-6	Aroclor-1248	79.	U
11097-69-1	Aroclor-1254	160	U
11096-82-5	Aroclor-1260	160	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ92

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350878

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH050878A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 14 Date Analyzed: 07/04/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	29	~~B~~ U
67-64-1	Acetone	56	~~B~~ U
75-15-0	Carbon Disulfide	2	J
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	6 ~~5~~	~~B~~ U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

Three Corrections RJZ 1 Aug 90

FORM I VOA 1/87 Rev.

14427 ELQ92 SAMPLES DATA SUMMARY

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ92

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350878

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH050878A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 14 Date Analyzed: 07/04/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.37	13	J
2.	SUBST. CYCLOHEXANE	10.60	22	J
3.	UNKNOWN	11.00	9.3	J
4.	ETHYLMETHYLCYCLOHEXANE	12.59	15	J
5. 3868-64-2	PENTALENE,OCTAHYDRO-2-METHYL	12.94	13	J
6.	METHYLETHYLCYCLOHEXANE	13.20	20	J
7.	DIMETHYL OCTANE	13.50	10	J
8.	DIMETHYL OCTANE	13.90	21	J
9.	UNKNOWN	14.39	12	J
10.	UNKNOWN HYDROCARBON	14.67	15	J

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ93

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350879

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR050879B11

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 2 Date Analyzed: 07/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	19	~~B~~ U
67-64-1	Acetone	19	~~B~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

ESZ 1 Aug 90

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ93

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350879

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR050879B11

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 2 Date Analyzed: 07/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ94

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350886

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH050886A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 4 Date Analyzed: 07/04/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	~~B~~ U
67-64-1	Acetone	13	~~B~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

RJZ 1Aug90

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1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ94

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350886

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH050886A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 4 Date Analyzed: 07/04/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LAB. ARTIFACT	0.90	4.2	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ95

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350890

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH050890A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 Date Analyzed: 07/04/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	14	~~B~~ U
67-64-1	Acetone	11	~~B~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

RJZ 1 Aug 90

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ95

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350890

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH050890A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 Date Analyzed: 07/04/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ96

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350891

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR050891A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 11 Date Analyzed: 07/06/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	45	
67-64-1	Acetone	26	~~B~~ U
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

RTZ 1Aug90

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ96

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350891

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GR050891A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 11 Date Analyzed: 07/06/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ97

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350892

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH050892A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 Date Analyzed: 07/04/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	14	~~B~~ U
67-64-1	Acetone	11	~~B~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

RJZ 1 Aug 90

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ97

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350892

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH050892A12

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 Date Analyzed: 07/04/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ92

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350878

Sample wt/vol: 30.5 (g/mL) G Lab File ID: GH050878A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 14 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)Ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
100-51-6	Benzyl Alcohol	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
39638-32-9	bis(2-Chloroisopropyl)Ether	380	U
106-44-5	4-Methylphenol	380	U
621-64-7	N-Nitroso-Di-n-Propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	380	U
65-85-0	Benzoic Acid	1900	U
111-91-1	bis(2-Chloroethoxy)Methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	380	U
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-Methylphenol	380	U
91-57-6	2-Methylnaphthalene	59	J
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	1900	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethyl Phthalate	380	U
208-96-8	Acenaphthylene	380	U
606-20-2	2,6-Dinitrotoluene	380	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ92

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350878

Sample wt/vol: 30.5 (g/mL) G Lab File ID: GH050878A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 14 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	50	J
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	1900	U
132-64-9	Dibenzofuran	45	J
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	62	J
100-01-6	4-Nitroaniline	1900	U
534-52-1	4,6-Dinitro-2-Methylphenol	1900	U
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	1900	U
85-01-8	Phenanthrene	720	
120-12-7	Anthracene	150	J
84-74-2	Di-n-Butylphthalate	510	
206-44-0	Fluoranthene	1400	
129-00-0	Pyrene	1000	
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	770	U
56-55-3	Benzo(a)Anthracene	1000	
218-01-9	Chrysene	990	
117-81-7	bis(2-Ethylhexyl)Phthalate	380	U
117-84-0	Di-n-Octyl Phthalate	380	U
205-99-2	Benzo(b)Fluoranthene	740	
207-08-9	Benzo(k)Fluoranthene	670	
50-32-8	Benzo(a)Pyrene	870	
193-39-5	Indeno(1,2,3-cd)Pyrene	420	
53-70-3	Dibenz(a,h)Anthracene	250	J
191-24-2	Benzo(g,h,i)Perylene	410	

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ92

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350878

Sample wt/vol: 30.5 (g/mL) G Lab File ID: GH050878A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 14 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.90	1000	J
2.	UNKNOWN	6.10	740	J
3.	UNKNOWN	6.20	500	J
4.	UNKNOWN	6.43	500	J
5.	UNKNOWN	6.88	970	J
6.	DIETHYLBENZENE	7.07	930	J
7.	UNKNOWN	7.18	460	J
8.	ETHYLDIMETHYLBENZENE	7.38	1100	J
9.	ETHYLDIMETHYLBENZENE	7.67	1200	J
10.	UNKNOWN	7.80	580	J
11.	UNKNOWN	7.90	500	J
12.	UNKNOWN	8.00	500	J
13.	UNKNOWN	13.22	1100	J
14.	UNKNOWN	13.32	1800	J
15.	UNKNOWN	13.42	1500	J
16.	UNKNOWN	13.49	1300	J
17.	UNKNOWN	13.60	770	J
18.	TETRAMETHYLPHENANTHRENE	14.60	620	J
19.	UNKNOWN	15.34	430	J
20.	BENZOFLUORANTHENE	18.45	580	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ93

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350879

Sample wt/vol: 30.8 (g/mL) G Lab File ID: GH050879A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 2 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
39638-32-9	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)Methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-Methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ93

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350879

Sample wt/vol: 30.8 (g/mL) G Lab File ID: GH050879A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 2 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.9 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	54	J
206-44-0	Fluoranthene	340	U
129-00-0	Pyrene	340	U
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)Anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
117-84-0	Di-n-Octyl Phthalate	340	U
205-99-2	Benzo(b)Fluoranthene	340	U
207-08-9	Benzo(k)Fluoranthene	340	U
50-32-8	Benzo(a)Pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)Perylene	340	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ93

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350879

Sample wt/vol: 30.8 (g/mL) G Lab File ID: GH050879A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 2 dec. Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.9 Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL	6.03	310	AJ

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ94

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350886

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH050886A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 4 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	340	U
111-44-4	bis(2-Chloroethyl)Ether	340	U
95-57-8	2-Chlorophenol	340	U
541-73-1	1,3-Dichlorobenzene	340	U
106-46-7	1,4-Dichlorobenzene	340	U
100-51-6	Benzyl Alcohol	340	U
95-50-1	1,2-Dichlorobenzene	340	U
95-48-7	2-Methylphenol	340	U
39638-32-9	bis(2-Chloroisopropyl)Ether	340	U
106-44-5	4-Methylphenol	340	U
621-64-7	N-Nitroso-Di-n-Propylamine	340	U
67-72-1	Hexachloroethane	340	U
98-95-3	Nitrobenzene	340	U
78-59-1	Isophorone	340	U
88-75-5	2-Nitrophenol	340	U
105-67-9	2,4-Dimethylphenol	340	U
65-85-0	Benzoic Acid	1700	U
111-91-1	bis(2-Chloroethoxy)Methane	340	U
120-83-2	2,4-Dichlorophenol	340	U
120-82-1	1,2,4-Trichlorobenzene	340	U
91-20-3	Naphthalene	340	U
106-47-8	4-Chloroaniline	340	U
87-68-3	Hexachlorobutadiene	340	U
59-50-7	4-Chloro-3-Methylphenol	340	U
91-57-6	2-Methylnaphthalene	340	U
77-47-4	Hexachlorocyclopentadiene	340	U
88-06-2	2,4,6-Trichlorophenol	340	U
95-95-4	2,4,5-Trichlorophenol	1700	U
91-58-7	2-Chloronaphthalene	340	U
88-74-4	2-Nitroaniline	1700	U
131-11-3	Dimethyl Phthalate	340	U
208-96-8	Acenaphthylene	340	U
606-20-2	2,6-Dinitrotoluene	340	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ94

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350886

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH050886A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 4 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 8.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1700	U
83-32-9	Acenaphthene	340	U
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	1700	U
132-64-9	Dibenzofuran	340	U
121-14-2	2,4-Dinitrotoluene	340	U
84-66-2	Diethylphthalate	340	U
7005-72-3	4-Chlorophenyl-phenylether	340	U
86-73-7	Fluorene	340	U
100-01-6	4-Nitroaniline	1700	U
534-52-1	4,6-Dinitro-2-Methylphenol	1700	U
86-30-6	N-Nitrosodiphenylamine (1)	340	U
101-55-3	4-Bromophenyl-phenylether	340	U
118-74-1	Hexachlorobenzene	340	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	340	U
120-12-7	Anthracene	340	U
84-74-2	Di-n-Butylphthalate	51	J
206-44-0	Fluoranthene	42	J
129-00-0	Pyrene	41	J
85-68-7	Butylbenzylphthalate	340	U
91-94-1	3,3'-Dichlorobenzidine	690	U
56-55-3	Benzo(a)Anthracene	340	U
218-01-9	Chrysene	340	U
117-81-7	bis(2-Ethylhexyl)Phthalate	340	U
117-84-0	Di-n-Octyl Phthalate	340	U
205-99-2	Benzo(b)Fluoranthene	340	U
207-08-9	Benzo(k)Fluoranthene	340	U
50-32-8	Benzo(a)Pyrene	340	U
193-39-5	Indeno(1,2,3-cd)Pyrene	340	U
53-70-3	Dibenz(a,h)Anthracene	340	U
191-24-2	Benzo(g,h,i)Perylene	340	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ94

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350886

Sample wt/vol: 30.2 (g/mL) G Lab File ID: GH050886A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 4 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 8.0 Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL	6.05	280	AJ

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ95

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350890

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH050890A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)Ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
100-51-6	Benzyl Alcohol	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
39638-32-9	bis(2-Chloroisopropyl)Ether	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-Di-n-Propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
65-85-0	Benzoic Acid	1700	U
111-91-1	bis(2-Chloroethoxy)Methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-Methylphenol	350	U
91-57-6	2-Methylnaphthalene	79	J
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	1700	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	1700	U
131-11-3	Dimethyl Phthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ95

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350890

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH050890A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1700	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	1700	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	1700	U
534-52-1	4,6-Dinitro-2-Methylphenol	1700	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
84-74-2	Di-n-Butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	710	U
56-55-3	Benzo(a)Anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)Phthalate	350	U
117-84-0	Di-n-Octyl Phthalate	350	U
205-99-2	Benzo(b)Fluoranthene	350	U
207-08-9	Benzo(k)Fluoranthene	350	U
50-32-8	Benzo(a)Pyrene	350	U
193-39-5	Indeno(1,2,3-cd)Pyrene	350	U
53-70-3	Dibenz(a,h)Anthracene	350	U
191-24-2	Benzo(g,h,i)Perylene	350	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ95

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350890

Sample wt/vol: 30.1 (g/mL) G Lab File ID: GH050890A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 17301-32-5	UNDECANE, 4,7-DIMETHYL-	8.94	2400	J
2. 1560-96-9	TRIDECANE, 2-METHYL-	9.39	1300	J
3. 3891-98-3	DODECANE, 2,6,10-TRIMETHYL-	9.49	1500	J
4.	UNKNOWN HYDROCARBON	9.65	5000	J
5. 54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	10.05	3600	J
6. 54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	10.30	6800	J
7.	UNKNOWN HYDROCARBON	10.64	1700	J
8.	UNKNOWN HYDROCARBON	10.70	1900	J
9. 54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	10.94	7500	J
10. 54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	11.22	5000	J
11.	UNKNOWN HYDROCARBON	11.52	13000	J
12.	UNKNOWN HYDROCARBON	11.77	2300	J
13. 593-45-3	OCTADECANE	12.07	5000	J
14. 74764-11-7	IRON, TRICARBONYL[N-(PHENYL-	12.14	3400	J
15.	UNKNOWN HYDROCARBON	12.30	900	J
16.	UNKNOWN HYDROCARBON	12.60	5000	J
17.	UNKNOWN HYDROCARBON	12.70	720	J
18.	UNKNOWN	13.02	930	J
19. 74764-11-7	IRON, TRICARBONYL[N-(PHENYL-	13.12	2700	J
20. 629-99-2	PENTACOSANE	13.60	2000	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ96

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350891

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH050891A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 11 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)Ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
100-51-6	Benzyl Alcohol	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
39638-32-9	bis(2-Chloroisopropyl)Ether	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-Di-n-Propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
65-85-0	Benzoic Acid	1800	U
111-91-1	bis(2-Chloroethoxy)Methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	62	J
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-Methylphenol	370	U
91-57-6	2-Methylnaphthalene	62	J
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethyl Phthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ96

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350891

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH050891A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 11 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	370	U
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	370	U
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-Methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
84-74-2	Di-n-Butylphthalate	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	740	U
56-55-3	Benzo(a)Anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)Phthalate	41	J
117-84-0	Di-n-Octyl Phthalate	370	U
205-99-2	Benzo(b)Fluoranthene	370	U
207-08-9	Benzo(k)Fluoranthene	370	U
50-32-8	Benzo(a)Pyrene	370	U
193-39-5	Indeno(1,2,3-cd)Pyrene	370	U
53-70-3	Dibenz(a,h)Anthracene	370	U
191-24-2	Benzo(g,h,i)Perylene	370	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ96

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350891

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH050891A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 11 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

Number TICs found: 13

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	VOA TCL	5.52	190	J
2.	ALDOL	6.05	1100	AJ
3.	ETHYLMETHYLBENZENE	6.20	450	J
4.	ETHYLMETHYLBENZENE	6.38	190	J
5.	TRIMETHYLBENZENE	6.52	370	J
6.	TRIMETHYLBENZENE	6.82	260	J
7.	UNKNOWN	7.03	640	J
8.	ETHYLDIMETHYLBENZENE	7.33	340	J
9. 1610-18-0	PROMETON (ACN)	11.85	300	J
10.	UNKNOWN	14.90	260	J
11.	DIMETHYLHEPTADECANE	15.32	370	J
12.	UNKNOWN HYDROCARBON	16.25	150	J
13. 630-02-4	OCTACOSANE	17.49	220	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ97

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350892

Sample wt/vol: 30.3 (g/mL) G Lab File ID: GH050892A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)Ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
100-51-6	Benzyl Alcohol	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
39638-32-9	bis(2-Chloroisopropyl)Ether	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-Di-n-Propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
65-85-0	Benzoic Acid	1700	U
111-91-1	bis(2-Chloroethoxy)Methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-Methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	1700	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	1700	U
131-11-3	Dimethyl Phthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ97

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350892

Sample wt/vol: 30.3 (g/mL) G Lab File ID: GH050892A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1700	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	1700	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	1700	U
534-52-1	4,6-Dinitro-2-Methylphenol	1700	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	120	J
120-12-7	Anthracene	350	U
84-74-2	Di-n-Butylphthalate	52	J
206-44-0	Fluoranthene	370	
129-00-0	Pyrene	280	J
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	710	U
56-55-3	Benzo(a)Anthracene	430	
218-01-9	Chrysene	230	J
117-81-7	bis(2-Ethylhexyl)Phthalate	47	J
117-84-0	Di-n-Octyl Phthalate	350	U
205-99-2	Benzo(b)Fluoranthene	430	X
207-08-9	Benzo(k)Fluoranthene	430	X
50-32-8	Benzo(a)Pyrene	210	J
193-39-5	Indeno(1,2,3-cd)Pyrene	180	J
53-70-3	Dibenz(a,h)Anthracene	58	J
191-24-2	Benzo(g,h,i)Perylene	210	J

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ97

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350892

Sample wt/vol: 30.3 (g/mL) G Lab File ID: GH050892A20

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/01/90

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.0

Number TICs found: 22

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALDOL	6.07	360	AJ
2.	ALDOL	6.48	250	AJ
3.	UNKNOWN	14.92	570	J
4.	UNKNOWN	14.99	290	J
5.	UNKNOWN	15.24	1300	J
6.	UNKNOWN	15.47	900	J
7.	UNKNOWN	16.04	790	J
8.	UNKNOWN	16.25	290	J
9.	UNKNOWN	16.54	430	J
10.	UNKNOWN	16.75	320	J
11.	UNKNOWN	16.89	290	J
12.	UNKNOWN	17.14	470	J
13.	UNKNOWN	17.20	290	J
14.	UNKNOWN	17.40	640	J
15.	UNKNOWN	17.54	900	J
16.	UNKNOWN	17.64	750	J
17.	UNKNOWN	17.74	470	J
18.	UNKNOWN	17.94	430	J
19.	UNKNOWN	18.05	320	J
20.	UNKNOWN	18.17	390	J
21.	UNKNOWN	19.37	500	J
22.	UNKNOWN	21.29	430	J

FORM I SV-TIC 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ92

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350878

Sample wt/vol: 30.5 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 14 dec. Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/10/90

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.1	U
319-85-7	beta-BHC	9.1	U
319-86-8	delta-BHC	9.1	U
58-89-9	gamma-BHC (Lindane)	9.1	U
76-44-8	Heptachlor	9.1	U
309-00-2	Aldrin	9.1	U
1024-57-3	Heptachlor epoxide	9.1	U
959-98-8	Endosulfan I	9.1	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	18.	U
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	18.	U
72-43-5	Methoxychlor	91.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	91.	U
5103-74-2	gamma-Chlordane	91.	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	91.	U
11104-28-2	Aroclor-1221	91.	U
11141-16-5	Aroclor-1232	91.	U
53469-21-9	Aroclor-1242	91.	U
12672-29-6	Aroclor-1248	91.	U
11097-69-1	Aroclor-1254	180	U
11096-82-5	Aroclor-1260	180	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ93

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350879

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 2 dec. Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90

GPC Cleanup: (Y/N) N pH: 7.9 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.2	U
319-85-7	beta-BHC	8.2	U
319-86-8	delta-BHC	8.2	U
58-89-9	gamma-BHC (Lindane)	8.2	U
76-44-8	Heptachlor	8.2	U
309-00-2	Aldrin	8.2	U
1024-57-3	Heptachlor epoxide	8.2	U
959-98-8	Endosulfan I	8.2	U
60-57-1	Dieldrin	16.	U
72-55-9	4,4'-DDE	16.	U
72-20-8	Endrin	16.	U
33213-65-9	Endosulfan II	16.	U
72-54-8	4,4'-DDD	16.	U
1031-07-8	Endosulfan sulfate	16.	U
50-29-3	4,4'-DDT	16.	U
72-43-5	Methoxychlor	82.	U
53494-70-5	Endrin ketone	16.	U
5103-71-9	alpha-Chlordane	82.	U
5103-74-2	gamma-Chlordane	82.	U
8001-35-2	Toxaphene	160	U
12674-11-2	Aroclor-1016	82.	U
11104-28-2	Aroclor-1221	82.	U
11141-16-5	Aroclor-1232	82.	U
53469-21-9	Aroclor-1242	82.	U
12672-29-6	Aroclor-1248	82.	U
11097-69-1	Aroclor-1254	160	U
11096-82-5	Aroclor-1260	160	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ94

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350886

Sample wt/vol: 30.2 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 4 dec. Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90

GPC Cleanup: (Y/N) N pH: 8.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.3	U
319-85-7	beta-BHC	8.3	U
319-86-8	delta-BHC	8.3	U
58-89-9	gamma-BHC (Lindane)	8.3	U
76-44-8	Heptachlor	8.3	U
309-00-2	Aldrin	8.3	U
1024-57-3	Heptachlor epoxide	8.3	U
959-98-8	Endosulfan I	8.3	U
60-57-1	Dieldrin	16.	U
72-55-9	4,4'-DDE	16.	U
72-20-8	Endrin	16.	U
33213-65-9	Endosulfan II	16.	U
72-54-8	4,4'-DDD	16.	U
1031-07-8	Endosulfan sulfate	16.	U
50-29-3	4,4'-DDT	16.	U
72-43-5	Methoxychlor	83.	U
53494-70-5	Endrin ketone	16.	U
5103-71-9	alpha-Chlordane	83.	U
5103-74-2	gamma-Chlordane	83.	U
8001-35-2	Toxaphene	160	U
12674-11-2	Aroclor-1016	83.	U
11104-28-2	Aroclor-1221	83.	U
11141-16-5	Aroclor-1232	83.	U
53469-21-9	Aroclor-1242	83.	U
12672-29-6	Aroclor-1248	83.	U
11097-69-1	Aroclor-1254	160	U
11096-82-5	Aroclor-1260	160	U

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ95

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350890

Sample wt/vol: 30.1 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 dec. Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.6	U
319-85-7	beta-BHC	8.6	U
319-86-8	delta-BHC	8.6	U
58-89-9	gamma-BHC (Lindane)	8.6	U
76-44-8	Heptachlor	8.6	U
309-00-2	Aldrin	8.6	U
1024-57-3	Heptachlor epoxide	8.6	U
959-98-8	Endosulfan I	8.6	U
60-57-1	Dieldrin	17.	U
72-55-9	4,4'-DDE	17.	U
72-20-8	Endrin	17.	U
33213-65-9	Endosulfan II	17.	U
72-54-8	4,4'-DDD	17.	U
1031-07-8	Endosulfan sulfate	17.	U
50-29-3	4,4'-DDT	17.	U
72-43-5	Methoxychlor	86.	U
53494-70-5	Endrin ketone	17.	U
5103-71-9	alpha-Chlordane	86.	U
5103-74-2	gamma-Chlordane	86.	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	86.	U
11104-28-2	Aroclor-1221	86.	U
11141-16-5	Aroclor-1232	86.	U
53469-21-9	Aroclor-1242	86.	U
12672-29-6	Aroclor-1248	86.	U
11097-69-1	Aroclor-1254	170	U
11096-82-5	Aroclor-1260	170	U

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ96

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350891

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 11 dec. Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/11/90

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.0	U
319-85-7	beta-BHC	9.0	U
319-86-8	delta-BHC	9.0	U
58-89-9	gamma-BHC (Lindane)	9.0	U
76-44-8	Heptachlor	9.0	U
309-00-2	Aldrin	9.0	U
1024-57-3	Heptachlor epoxide	9.0	U
959-98-8	Endosulfan I	9.0	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	18.	U
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	18.	U
72-43-5	Methoxychlor	90.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	90.	U
5103-74-2	gamma-Chlordane	90.	U
8001-35-2	Toxaphene	180	U
12674-11-2	Aroclor-1016	90.	U
11104-28-2	Aroclor-1221	90.	U
11141-16-5	Aroclor-1232	90.	U
53469-21-9	Aroclor-1242	90.	U
12672-29-6	Aroclor-1248	90.	U
11097-69-1	Aroclor-1254	180	U
11096-82-5	Aroclor-1260	180	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ97

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ92

Matrix: (soil/water) SOIL Lab Sample ID: 350892

Sample wt/vol: 30.3 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 7 dec. Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/17/90

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.5	U
319-85-7	beta-BHC	8.5	U
319-86-8	delta-BHC	8.5	U
58-89-9	gamma-BHC (Lindane)	8.5	U
76-44-8	Heptachlor	8.5	U
309-00-2	Aldrin	8.5	U
1024-57-3	Heptachlor epoxide	8.5	U
959-98-8	Endosulfan I	8.5	U
60-57-1	Dieldrin	17.	U
72-55-9	4,4'-DDE	17.	U
72-20-8	Endrin	17.	U
33213-65-9	Endosulfan II	17.	U
72-54-8	4,4'-DDD	17.	U
1031-07-8	Endosulfan sulfate	17.	U
50-29-3	4,4'-DDT	17.	U
72-43-5	Methoxychlor	85.	U
53494-70-5	Endrin ketone	17.	U
5103-71-9	alpha-Chlordane	85.	U
5103-74-2	gamma-Chlordane	85.	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	85.	U
11104-28-2	Aroclor-1221	85.	U
11141-16-5	Aroclor-1232	85.	U
53469-21-9	Aroclor-1242	85.	U
12672-29-6	Aroclor-1248	85.	U
11097-69-1	Aroclor-1254	170	U
11096-82-5	Aroclor-1260	170	U

FORM I PEST 1/87 Rev.

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

CRL Receipt Date 7/25/90 FIT Receipt Date 8/7/90 Review Completed 8/17/90

TO: D. Sullivan
FROM: C. Kouris
SUBJECT: Texaco Inc.
PAN: IL0602 (1 hour charged for review) Case # 14427

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
#	Low Soil	#	Low Soil
6	Low Water		Low Water
	Drinking Water		Drinking Water
	Other		Other

Project Data Status X Completed!!

_____ Incomplete, awaiting _____

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 6/26/90

0759:2

recycled paper

Table 4-__
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED _____ SAMPLES

CK 8/17/90

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	1	2	3 Dup	4	5 Blank	6	7	8	9	10	11	12
				Date												
				Time												
				Well Depth (Feet)												
				CRL Log Number												
				CLP Organic Traffic Report Number	ELR 94	ELR 95	ELQ 98	ELR 96	ELR 97	ELQ 99						
				CLP Inorganic Traffic Report Number												
				Temperature (°C)												
				Specific Conductivity (µmhos/cm)												
				pH												
				Compound Detected (values in µg/L or µg/kg)												
				Volatile Organics												
Gas	A,D,G,I	OCC	HH	chloromethane												
Gas	A,D,G,I	OCC	HH	bromomethane												
Gas	A,D,G,I	OCC	HH	vinyl chloride												
Gas	A,D,G,I	OCC	HH	chloroethane												
Liquid	A,D,H,I	SOL	HH,CLA	methylene chloride												
Liquid	E,H,I,A	SOL	K,CLA	acetone												
Liquid	A,H,I	SOL	SH	carbon disulfide												
Liquid	A,D,G,I	SOL	HH	1,1-dichloroethene												
Liquid	A,D,H,G	SOL	HH	1,1-dichloroethane												
Liquid	A,D,G	SOL	HH	1,2-dichloroethene (total)												
Liquid	A,D	SOL	HH	chloroform												
Liquid	A,D,G	SOL	HH	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)												
Liquid	A,D	SOL	HH	1,1,1-trichloroethane												
Liquid	A,D	SOL	HH	carbon tetrachloride												
Liquid	A,D,G	SOL	HYD	vinyl acetate												
Liquid	A,D	OCC	HH	bromodichloromethane												
Liquid	A,D,G	SOL	HH	1,2-dichloropropane												
Liquid	A,D,G	SOL	HH	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	HH	trichloroethene												
Liquid	A,D	OCC	HH	dibromochloromethane												
Liquid	A,D	SOL	HH	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	HH	trans-1,3-dichloropropene												
Liquid	A,D	SOL	HH,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	HH	tetrachloroethene												
Liquid	A,G,E	SOL	A,CLA	toluene												
Liquid	A,D,E	SOL	HH	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	HA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene												
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)												

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number 1	2	3 (Dup)	4	5 (Blank)	6	7	8	9	10	11	12
				Semivolatile Organics												
S, thick l	A,B,E	OCC	P	phenol												
Liquid	A,D,B	OCC	HH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,H	SOL	HA	1,3-dichlorobenzene												
Solid	A,D,H	OCC	HA	1,4-dichlorobenzene												
Liquid	A,D,H	SOL	A	benzyl alcohol												
Liquid	A,D,H	OCC	HA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol												
	A,D	OCC	HH	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	H-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	HH	hexachloroethane												
Liquid	A,D	OCC	NA	nitrobenzene												
Liquid	A,D	OCC	H	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	HH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	HA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene												
Solid	A,D	OCC	HH	4-chloroaniline												
Liquid	A,D,B	OCC	HH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene												
Liquid	A,D,B	OCC	HH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	NH	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	NA	2,6-dinitrotoluene												
Solid	A,D	OCC	NH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene												
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran												
Solid	A,D	OCC	NA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	HH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene												
Solid	A,D,E	OCC	NH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	HH	n-nitrosodiphenylamine												
Liquid	A,D	OCC	HH	4-bromophenyl-phenylether												
Solid	A,D	OCC	HA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene												

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number ___1	___2	___3 Dup	___4	___5 Blank	___6	___7	___8	___9	___10	___11	___12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene												
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate												
Solid	A,D	OCC	PAH	fluoranthene												
Solid	A,D	OCC	PAH	pyrene												
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	HA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene												
Solid	A,D	OCC	PAH	chrysene												
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate												
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo[b]fluoranthene												
Solid	A,D	OCC	PAH	benzo[k]fluoranthene												
Solid	A,D,K,L	OCC	PAH	benzo[a]pyrene												
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene												
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene												
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene												
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Mariate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

Table 4- (Cont.)

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
J	Indicates an estimated value.	Compound value may be semiquantitative.
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µL in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will <u>not</u> apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS		DEFINITION	INTERPRETATION
E	E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	S	Analysis by Method of Standard Additions.	Value is quantitative.
R	N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ		DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J		Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
U	U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
	M	Duplicate injection precision not met.	Value may be semiquantitative.
	W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
	R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

~~7/25/90~~ CR

8/21/90

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

8/7/90

DATE: 8/2/90

SUBJECT: Review of Region V CLP Data
Received for Review on July 25, 1990

FROM: Curtis Ross, Director (5SCRL) Chuck Ellis for
Central Regional Laboratory

TO: Data User: FIT

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

SITE NAME: TEXACO INC. SALES TE (IL) SMO Case No. 14427

EPA Data Set No. (2) No. of Samples: 6 D.U./Activity Numbers 1

CRL No.

SMO Traffic No. ELQ98-99 ELR94-97

CLP Laboratory: COMPUCHEM Hrs. Required for Review: 5.0 + 2 = 7.

Following are our findings.

Six (6) water samples were determined for low-level volatile organics, semivolatile organics, and pesticides/PCB's. All the pesticide/PCB results are estimated because of surrogate and continuing calibration outliers; otherwise most QC problems with this set of samples are relatively minor.

The reviewer's narrative and data qualifiers follow.

Ronald J. Zanger

Ronald J. Zanger

Roy F. Weston, Inc.

31 July 1990

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

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

DPO: [ ] ACTION [ ] FYI REGION IV

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 14427 LABORATORY Compuchem

SDG NO(s). ELQ98 DATA USER FIT

SOW 2/88 REVIEW COMPLETION DATE 31 July 1990

NO. OF SAMPLES Six (6) MATRIX Water (SPECIFY WATER, SOIL, OR OTHER)

REVIEWER [ ] ESD [X] ESAT [X] OTHER, CONTRACT/CONTRACTOR Ronald J. Zanger

IS LABORATORY CERTIFICATION STATEMENT SIGNED? [ ] YES [ ] NO

IS DATA PACKAGE CONSISTENT WITH THE LABORATORY'S CERTIFIED NARRATIVE? [ ] YES [ ] NO

	VOA	BNA	PEST	OTHER
1. HOLDING TIMES	O	O	O	
2. GC-MS TUNE/ GC PERFORMANCE	O	O	O	
3. INITIAL CALIBRATIONS	O	O	O	
4. CONTINUING CALIBRATIONS	M	X	M	
5. FIELD BLANKS ('F' = not applicable)	O	O	O	
6. LABORATORY BLANKS	O	O	O	
7. SURROGATES	O	O	M	
8. MS/MSD	O	O	O	
9. REGIONAL QC ('F' = not applicable)	F	F	F	
10. INTERNAL STANDARDS	O	O		
11. COMPOUND IDENTIFICATION	O	O	O	
12. COMPOUND QUANTITATION	O	O	O	
13. SYSTEM PERFORMANCE	O	O		

O = No problems or minor problems that do not affect data usability.
X = No more than *about* 5% of the data points are qualified as either estimated or unusable.
M = More than *about* 5% of the data points are qualified as estimated.
Z = More than *about* 5% of the data points are qualified as unusable.
A = Used *in conjunction with* above codes to indicate that item requires DPO action.

DPO ACTION ITEMS:

AREAS OF CONCERN: All pesticide/PCB results are estimated because of calibration and surrogate outliers.

DATA QUALIFIERS

Contractor: COMPU

Case/SAS number: 14427

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(1) Holding Times:

The Organic Traffic Report lists the collection date for all samples as 26 June, 1990.

All volatile organics samples were analyzed within the fourteen-day limit for the analysis of voaltile organics in water samples. All semivolatile organics samples were extracted within the seven-day limit for the extraction of water samples for semivolatile organics, and all pesticide/PCB samples were extracted within the fourteen-day limit for the extraction of water samples for pesticides/PCB's. All semivolatile organics and pesticide/PCB extracts were analyzed within the forty-day limit for the analysis of extracts. No problems indicated.

(2) GC/MS Tuning and Mass Calibration:

All GC/MS ion abundance and percent relative abundance criteria were met, both in the bromofluorobenzene tunes for volatile organics analysis and in the decafluorotriphenylphosphine tunes for semivoaltile organics analysis. No problems indicated.

(3) Calibration:

GC/MS calibration outliers are listed on the attached forms.

(4) Method Blanks:

The volatile organics method blank VBLKWM was reported to contain methylene chloride, affecting samples ELR94 and ELR97. The volatile organics method blank VBLKSC was reported to contain methylene chloride and acetone, affecting samples ELQ98, ELQ99, ELR95, ELR96, ELR94MS, and ELR94MSD.

The semivolatile organics and pesticide/PCB method blanks were reported to free of contamination.

Affected samples containing an amount of methylene chloride or acetone less than, or equal to, ten times the amount of methylene chloride or acetone found in the associated method blank are qualified "U", undetected, for methylene chloride or acetone in that sample.

Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 31 July 1990

DATA QUALIFIERS

Contractor: COMPU

Case/SAS number: 14427

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(5) Surrogate Spike Recoveries:

All volatile organics surrogate spike recoveries met contract-required QC limits.

All semivolatile organics surrogate spike recoveries met contract-required QC limits with the exception of 2-fluorophenol in sample ELR99, which was low, below contrct-required QC limits. No qualification of the data is required on the basis of a single surrogate outlier in a semivolatile organics fraction.

Pesticide/PCB surrogate (dibutylchlorendate) recoveries were high, above contract-required QC limits, for samples ELQ98, ELQ99, ELR95, and ELR97. Results for these samples are estimated, "J" or "UJ", for positive and negative results, respectively.

(6) Matrix Spike/Matrix Spike Duplicate Recoveries:

Sample ELR94 was used for all matrix spikes.

All volatile organics matrix spikes, as well as their associated RPD's, met advisory QC limits with the exception of the RPD for 1,1-dichloroethene, which was high, above advisory QC limits. No qualification of the data is required on the basis of a single MS/MSD outlier.

All semivolatile organics and pesticide/PCB matrix spikes, as well as their associated RPD's, met advisory QC limits. No problems indicated.

(7) Field Blanks and Field Duplicate Samples:

Sample ELR98 is listed on the Organic Traffic Report as a field duplicate sample, but it does not indicate for which sample it is a duplicate, and no comparison with another sample is possible.

Sample ELR97 is listed on the Organic Traffic Report as a field blank. No positive TCL or TIC compounds were reported for any fraction.

Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 31 July 1990

DATA QUALIFIERS

Contractor: COMPU

Case/SAS number: 14427

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(8) Internal Standards:

All volatile organics and semivolatile organics internal standards met the -50%/+100% criterion for internal standard area counts, as well as the +/- 30-second criterion for internal standard retention time variation. No problems indicated.

Pesticides/PCB's:

No positive pesticide/PCB analytes were detected on the primary quantitation column. Quality control data for the secondary confirmation column were included in the data package, although this is not required in the absence of positive results with the primary column. The following discussion refers only to the primary column QC outliers.

In the Evaluation checks for linearity, %RSD was within the 10% limit for each compound. Combined Endrin and 4,4'-DDT degradation was reported as less than 20%, within the QC limit. Dibutylchlorendate retention time variation was within the 2.0% limit required for packed columns for all injections.

The 15% limit required for the Individual Standard "A" was exceeded by *delta*-BHC, Heptachlor, Aldrin, Endosulfan I, Endosulfan II, Dieldrin, and *gamma*-chlordane, affecting all samples, matrix spikes, and the method blank. In addition, the 15% limit for the Individual Standard "B" was exceeded by *alpha*-BHC, *beta*-BHC, *delta*-BHC, Heptachlorepoxide, 4,4'-DDE, 4,4'-DDD, Endrin ketone, and *alpha*-chlordane, affecting the method blank and matrix spikes, and, therefore, all samples. Results for the above-named compounds, in all samples, are estimated, "UJ", as no positive results were reported for any sample.

(9) Compound Quantitation and Reported Detection Limits:

A survey of the positive and negative results reveal no errors in calculation in any fraction. Comparisons of chromatograms of positives with the results, for which there were very few in this sample set, indicate that the positive results reported are at least in the correct range. No problems indicated.

(10) Other Case-Specific Problems:

Except for the surrogate and continuing calibration problems with the pesticide/PCB samples, there were very few QC problems with this set of samples. Volatile organics calibration outliers were somewhat excessive.

Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 31 July 1990

CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 14427 CONTRACTOR COMPU

Instrument # 19	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6/27/90 9:05			7/2/90 18:07			7/3/90 8:09			-					
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane	0.479			0.644	34.4	J	0.366								
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride	1.074			1.535	42.9	J	1.449	34.9	J						
Acetone															
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone															
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride	0.597			0.450			0.446	25.3	J						
Vinyl Acetate	0.332			0.422	27.1	J	0.413								
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene	0.316			0.225	28.8	J	0.235								
Trichloroethene															
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform	0.443			0.289	39.8	J	0.314	29.1	J						
4-Methyl-2-Pentanone															
2-Hexanone															
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene	0.909			1.199	31.9	J	1.158	27.4	J						
~~m-Xylene~~ Total xylenes	1.098			1.478	34.6	J	1.414	28.8	J						
~~o/p-Xylene~~ RJZ 31 July 90															

AFFECTED SAMPLES:

VBLKWM	VBLKSC
ELR97	ELQ98
ELR94	ELR94MS
	ELR94MSD
	ELR96
	ELR95
	ELQ99

Reviewer's Initials/Date: RJZ 31 July 90

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
SEMIVOLATILE MSL COMPOUNDS
(Page 1)

CASE/SAS # 14427 CONTRACTOR COMPU

Instrument # 1905	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME: RJZ 31 July 90	6/10/90 17:09			6/28/90 21:14											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
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															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid	0.199			0.122	38.7	J									
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline															
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol								--							
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline															
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline															
Acenaphthene															
2,4-Dinitrophenol	0.174			0.130	25.3	J									
4-Nitrophenol	0.244			0.158	35.2	J									
Dibenzofuran															

AFFECTED SAMPLES:

SBLK85, SBLK84
ELR94
ELQ98
ELQ99
ELR94MS
ELR94MSD
ELR95
ELR96
ELR97

Reviewer Initials/Date: RJZ 31 July 1990

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE/SAS # 14427 CONTRACTOR COMPU

Instrument # OS	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6/16/90 19:09			6/28/90 21:14											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene		-													
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline	0.313			0.215	31.3	J									
4,6-Dinitro-2-Methylphenol															
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene															
Pentachlorophenol															
Phenanthrene															
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene															
Butylbenzylphthalate															
Benzo(a)Anthracene															
bis(2-Ethylhexyl)Phthalate															
Chrysene															
Di-n-Octyl Phthalate															
Benzo(b)Fluoranthene															
Benzo(k)Fluoranthene															
Benzo(a)Pyrene															
Indeno(1,2,3-cd)Pyrene	0.654			0.730	26.1	J									
Dibenz(a,h)Anthracene															
Benzo(g,h,i) Perylene															

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: RJZ 31 July 1990

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result 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 but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} - 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

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 indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract shall be confirmed by GC/MS.

2

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - 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 Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

COMPUCHEM LABORATORIES

RECEIVED
JUL 2 1990
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Case Narrative #14427
SDG #ELQ98 SAS #5169HQ
Contract #68-D9-0032
CompuChem Laboratories, Inc.

SAMPLE IDENTIFICATIONS: ELQ98, ELQ99, ELR94, ELR95, ELR96, ELR97

These water samples were received June 27, 1990 in good condition, with the proper Traffic Report (TR), sealed in a cooler. Analyses were scheduled in accordance with the TR. Volatile, semivolatile, and pesticide analyses were performed as requested on these samples. Holding time requirements were met for all of these samples.

All pertinent Quality Assurance and Laboratory notices for CASE# 14427, SDG# ELQ98 SAS# 5169HQ are included in the sample data package.

VOLATILES:
There were no volatile Target Compound List analytes identified above the Contract Required Quantitation Limits in these samples. Tentatively Identified Compounds were found in one of these samples.
The associated instrument blanks and duplicate matrix spikes met all quality control requirements.

SEMIVOLATILES:
There were no semivolatile Target Compound List analytes identified above the Contract Required Quantitation Limits in these samples. Tentatively Identified Compounds were found in three of these samples.
Sample ELQ99 had one surrogate standard flagged as an outlier. One base surrogate standard recovery is allowed to fail in accordance to the Statement of Work. The associated method blanks and duplicate matrix spikes met all quality control requirements.

PESTICIDES:
There were no pesticide Target Compound List analytes confirmed above the Contract Required Quantitation Limits in this sample. Sample ELR95, ELR97, ELQ98, and ELQ99 appeared to have twice the normal amount of surrogate solution added to the samples. Since no TCL analytes were found in the samples it in no way effects the validity of the data. These samples are reported with reference to this qualifier.

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

COMPUCHEM LABORATORIES

The associated method blanks and duplicate matrix spikes met all quality control requirements.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data contained in the hardcopy data package and in the computer-readable data submitted on the floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Daniel E. Boone, Jr. DATE 07/23/90
TECHNICAL REVIEWER

Note: This report is paginated for reference and accountability in decreasing numerical sequence.

EPA

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number: 14427
SAS No. (if applicable):

1. Sample Description *(Enter in Column A)*
   1. Surface Water
   2. Ground Water
   3. Leachate
   4. Rinsate
   5. Soil/Sediment
   6. Oil (SAS)
   7. Waste (SAS)
   8. Other (SAS) *(Specify)*

IF VOA SAMPLE PRESERVED INDICATE IN COLUMN C WITH Y OR N.

2. Region Number: V
Sampling Co.: FIT
Sampler (Name): Michael Phillips
3. Ship To: CompuChem Labs 3308 Chapel Hill RTP, NC 27709 attn Natalie Carter

4. Date Shipped: 6/26/90
Carrier: F
Airbill Number: 7375419833
Triple volume required for matrix spike/duplicate aqueous sample.
Ship medium and high concentration samples in paint cans.
See reverse for additional instructions.

5. Date Received: 6/27/90
Received by: V. Batt
Laboratory Contract Number: 68-D9-0032
Unit Price: 797.00
6. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Number (From labels)	(A) Sample Description (From box 1)	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA	BNA	Pest/PCB	ARO/TOX	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number	(H) Sample Condition on Receipt	(I) High Conc. Phases (Check below) Solid	Water—MIS Liq.	Non Water—MIS Liq.
ELQ92	5	L	X	X	X			S1	6/26/90 1140	MELD82	350878			
ELQ93	5	L	X	X	X			S2	6/26/90 1210	MELD83	350879			
ELQ94	5	L	X	X	X			S3	6/26/90 1345	MELD84	350886			
ELQ95	5	L	X	X	X			S4	6/26/90 1505	MELD85	350890			
ELQ96	5	L	X	X	X			S5	6/26/90 1610	MELD86	350891			
ELQ97	5	L	X	X	X			S6	6/26/90 1654	MELD87	350892			
ELR94	2	L	X	X	X		MSD	MW1	6/26/90 1445	MELD89	350874			
ELR95	2	L	X	X	X			MW2	6/26/90 1600	MELD90	350895			
ELR96	2	L	X	X	X			MW3	6/26/90 1700	MELD91	350896			
~~Shipment is/is not complete~~										~~MAP 6/26/90~~				
ELR97	4	L	X	X	X		BLANK	BLK	6/26/90 1630	MELD92	350877			
ELQ98	2	L	X	X	X			DUP	6/26/90 1600	MELD93	350863			
ELQ99	2	L	X	X	X			MW4	6/26/90 1730	MELD94	350867			

Shipment is complete

RECEIVED IN GOOD CONDITION 6/27/90

EPA Form 9110-2 (11-89) Replaces EPA Form 2075-7 which may be used. Blue - Region Copy Pink - SMO Copy White - Lab Copy for Return to SMO Yellow - Lab Copy

14427 ELQ98 SAMPLE DATA PACKAGE 654

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	ELQ98	106	89	95	0	0
02	ELQ99	104	87	90	0	0
03	ELR94	93	92	110	0	0
04	ELR95	95	86	90	0	0
05	ELR96	94	88	84	0	0
06	ELR97	107	92	104	0	0
07	ELR94MS	104	96	97	0	0
08	ELR94MSD	98	94	103	0	0
09	VBLKWM	105	91	94	0	0
10	VBLKSC	110	90	105	0	0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA-1 1/87 Rev.

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	ELQ98	73	74	89	29	40	75	0	0
02	ELQ99	77	79	97	15	18 *	40	0	1
03	ELR94	76	76	108	27	34	65	0	0
04	ELR95	78	79	103	34	48	85	0	0
05	ELR96	74	75	98	31	43	69	0	0
06	ELR97	75	73	111	36	53	81	0	0
07	ELR94MS	67	68	98	47	53	76	0	0
08	ELR94MSD	67	67	99	50	55	72	0	0
09	SBLK85	76	78	100	45	66	75	0	0
10	SBLK84	72	74	98	36	54	78	0	0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl	(33-141)
S4 (PHL)	= Phenol-d5	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	PBLK66	82	0
02	ELR94MS	130	0
03	ELR94MSD	124	0
04	ELQ98	187 *	0
05	ELQ99	206 *	0
06	ELR94	132	0
07	ELR95	156 *	0
08	ELR96	111	0
09	ELR97	234 *	0
10			
11			
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30			

ADVISORY QC LIMITS (24-154)

S1 (DBC) = Dibutylchlorendate

Column used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

page 1 of 1

FORM II PEST-1 1/87 Rev.

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix Spike - EPA Sample No.: ELR94

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	53.5	107	61-145
Trichloroethene	50.0	0	50.9	102	71-120
Benzene	50.0	0	51.6	103	76-127
Toluene	50.0	0	51.7	103	76-125
Chlorobenzene	50.0	0	53.5	107	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	37.8	76	34 *	14	61-145
Trichloroethene	50.0	51.5	103	-1	14	71-120
Benzene	50.0	50.6	101	2	11	76-127
Toluene	50.0	50.1	100	3	13	76-125
Chlorobenzene	50.0	52.7	105	2	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP,14427,ELQ98,ELR94,LOW,WATER,350874,VOLATILE,EPA, CAP, CT900702B19,BG900702A19, , , ,

FORM III VOA-1 1/87 Rev.

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix Spike - EPA Sample No.: ELR94

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	200	0	92.8	46	12- 86
2-Chlorophenol	200	0	131	66	27-123
1,4-Dichlorobenzene	100	0	60.8	61	36 97
N-Nitroso-di-n-prop.(1)	100	0	64.0	64	41 116
1,2,4-Trichlorobenzene	100	0	64.4	64	39 98
4-Chloro-3-methylphenol	200	0	133	66	23 97
Acenaphthene	100	0	72.4	72	46-118
4-Nitrophenol	200	0	91.6	46	10- 80
2,4-Dinitrotoluene	100	0	75.2	75	24- 96
Pentachlorophenol	200	0	157	78	9-103
Pyrene	100	0	97.2	97	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	200	101	50	-8	42	12- 86
2-Chlorophenol	200	133	66	0	40	27-123
1,4-Dichlorobenzene	100	62.0	62	-2	28	36 97
N-Nitroso-di-n-prop.(1)	100	65.4	65	-2	38	41 116
1,2,4-Trichlorobenzene	100	65.6	66	-3	28	39 98
4-Chloro-3-methylphenol	200	134	67	-2	42	23 97
Acenaphthene	100	72.4	72	0	31	46-118
4-Nitrophenol	200	100	50	-8	50	10- 80
2,4-Dinitrotoluene	100	74.6	75	0	38	24- 96
Pentachlorophenol	200	151	76	3	50	9-103
Pyrene	100	101	101	-4	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: CLP ,14427,ELQ98,ELR94,LOW,WATER,350874,BNA,EPA,
CAP, HG900628B05,DH900628B05, , , ,

FORM III SV-1 1/87 Rev.

3E
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix Spike - EPA Sample No.: ELR94

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	0.200	0.000	0.180	90	56-123
Heptachlor	0.200	0.000	0.180	90	40-131
Aldrin	0.200	0.000	0.160	80	40-120
Dieldrin	0.500	0.000	0.470	94	52-126
Endrin	0.500	0.000	0.530	106	56-121
4,4'-DDT	0.500	0.000	0.520	104	38-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.200	0.170	85	6	15	56-123
Heptachlor	0.200	0.170	85	6	20	40-131
Aldrin	0.200	0.150	75	6	22	40-120
Dieldrin	0.500	0.450	90	4	18	52-126
Endrin	0.500	0.520	104	2	21	56-121
4,4'-DDT	0.500	0.500	100	4	27	38-127

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

FORM III PEST-1 8/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Lab File ID: CB900702B19 Lab Sample ID: VBLKWM

Date Analyzed: 07/02/90 Time Analyzed: 1854

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 19

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ELR94	350874	CN050874C19	0311
02	ELR97	350877	CN050877C19	0232

COMMENTS: CLP ,14427,ELQ98, ,LOW, ,000000,VOLATILE,BLANK,
CAP, CT900702B19,BG900702A19, , , ,

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Lab File ID: CB900703A19 Lab Sample ID: VBLKSC

Date Analyzed: 07/03/90 Time Analyzed: 0916

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 19

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	ELQ98	350863	CN050863A19	1425
02	ELQ99	350867	CN050867B19	1758
03	ELR95	350875	CN050875B19	1732
04	ELR96	350876	CN050876B19	1651
05	ELR94MS	350868	CR050868A19	1621
06	ELR94MSD	350869	CN050869A19	1548

COMMENTS: CLP ,14427,ELQ98, ,LOW, ,000000,VOLATILE,BLANK,
CAP, CT900703A19,BF900703C19, , , ,

page 1 of 1

FORM IV VOA 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Lab File ID: GH051087B05 Lab Sample ID: SBLK85

Date Extracted: 06/27/90 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 06/28/90 Time Analyzed: 2205

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 05

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	ELQ98	350863	GH050863B05	06/29/90
02	ELR94	350874	GH050874B05	06/28/90
03	ELR94MS	350864	GH050864B05	06/29/90
04	ELR94MSD	350865	GH050865B05	06/29/90

COMMENTS: CLP , , , ,LOW,WATER,351087,BNA,BLANK,
CAP, HG900628B05,DH900628B05, , , ,

page 1 of 1

FORM IV SV 1/87 Rev.

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Lab File ID: GH051086B05 Lab Sample ID: SBLK84

Date Extracted: 06/27/90 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 06/28/90 Time Analyzed: 2248

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 05

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	ELQ99	350867	GH050867B05	06/29/90
02	ELR95	350875	GH050875B05	06/29/90
03	ELR96	350876	GH050876B05	06/29/90
04	ELR97	350877	GH050877B05	06/29/90

COMMENTS: CLP , , , ,LOW,WATER,351086,BNA,BLANK,
CAP, HG900628B05,DH900628B05, , , ,

page 1 of 1

FORM IV SV 1/87 Rev.

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Lab Sample ID: 351164 Lab File ID: _____

Matrix:(soil/water) WATER Level:(low/med) LOW

Date Extracted: 06/28/90 Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed (1): 07/12/90 Date Analyzed (2): 07/19/90

Time Analyzed (1): 0459 Time Analyzed (2): 0913

Instrument ID (1): 02 Instrument ID (2): 07

GC Column ID (1): OV-101 GC Column ID (2): 2250/2401

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	ELR94MS	350871	07/12/90	
02	ELR94MSD	350872	07/12/90	
03	ELQ98	350863	07/12/90	
04	ELQ99	350867	07/12/90	
05	ELR94	350874	07/12/90	
06	ELR95	350875	07/12/90	
07	ELR96	350876	07/12/90	07/14/90
08	ELR97	350877	07/12/90	
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26				

COMMENTS: _____

page 1 of 1 FORM IV PEST 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKWM

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: VBLKWM

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900702B19

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/02/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKWM

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: VBLKWM

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900702B19

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/02/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKSC

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: VBLKSC

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900703A19

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	
67-64-1	Acetone	8	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKSC

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: VBLKSC

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900703A19

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	0.90	7.0	J

FORM I VOA-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK85

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: SBLK85

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH051087B05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK85

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: SBLK85

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH051087B05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK85

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: SBLK85

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH051087B05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK84

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: SBLK84

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH051086B05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK84

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: SBLK84

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH051086B05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK84

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: SBLK84

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH051086B05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK66

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 351164

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ98

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350863

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050863A19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5. ~~X~~	~~B~~ U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

RTZ 31 July 90

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14427 ELQ98 SAMPLE DATA SUMMARY

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ98

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350863

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050863A19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ99

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350867

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050867B19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ99

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350867

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050867B19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR94

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350874

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050874C19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR94

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350874

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050874C19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN CYCLIC HYDROCARBON	2.53	15	J
2. 2415-72-7	CYCLOPROPANE,PROPYL-	4.15	9.0	J
3. 110-82-7	CYCLOHEXANE	5.12	34	J
4. 108-87-2	CYCLOHEXANE,METHYL-	7.00	14	J

FORM I VOA-TIC 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR95

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350875

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050875B19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR95

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350875

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050875B19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR96

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350876

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050876B19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR96

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350876

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050876B19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR97

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350877

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050877C19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

FORM I VOA 1/87 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR97

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350877

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN050877C19

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ Date Analyzed: 07/03/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ98

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350863

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050863B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ98

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350863

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050863B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ98

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350863

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050863B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ99

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350867

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050867B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ99

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350867

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050867B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELQ99

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350867

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050867B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.52	12	J
2.	UNKNOWN	6.85	120	J
3.	UNKNOWN	7.12	76	J
4.	UNKNOWN	8.37	12	J
5.	UNKNOWN	8.52	10	J
6.	UNKNOWN	16.14	8.0	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR94

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350874

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050874B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR94

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350874

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050874B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR94

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350874

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050874B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/28/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.85	10	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR95

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350875

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050875B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR95

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350875

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050875B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR95

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350875

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050875B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR96

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350876

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050876B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR96

Lab Name: COMPUCHEM,RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350876

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050876B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR96

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350876

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050876B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.85	16	J
2.	UNKNOWN	16.14	4.0	J
3.	UNKNOWN	16.24	22	J
4.	UNKNOWN HEXANEDIOIC ACID EST	16.49	24	J
5.	UNKNOWN	16.57	32	J
6.	UNKNOWN HEXANEDIOIC ACID EST	16.62	16	J
7.	UNKNOWN	16.74	12	J
8.	UNKNOWN	16.82	66	J
9.	UNKNOWN	16.89	44	J
10.	UNKNOWN	16.92	60	J
11.	UNKNOWN HEXANEDIOIC ACID	16.97	16	J

FORM I SV-TIC 1/87 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR97

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350877

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050877B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR97

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350877

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050877B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenzo(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ELR97

Lab Name: COMPUCHEM.RTP Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350877

Sample wt/vol: 1000 (g/mL) ML Lab File ID: GH050877B05

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/27/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/29/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ98

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350863

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELQ99

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350867

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR94

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350874

Sample wt/vol: 1000 (g/mL) ML Lab File ID:

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. ____ dec. ____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR95

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350875

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR96

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HO SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350876

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

ELR97

Lab Name: COMPUCHEM LABORATORIES Contract: 68-D9-0032

Lab Code: COMPU Case No.: 14427 SAS No.: 5169HQ SDG No.: ELQ98

Matrix: (soil/water) WATER Lab Sample ID: 350877

Sample wt/vol: 1000 (g/mL) ML Lab File ID: _____

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 06/28/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/12/90

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

FORM I PEST 1/87 Rev.

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

CRL Receipt Date 7/18/90 FIT Receipt Date 7/26/90 Review Completed 7/29/90

TO: D. Barrett
FROM: ~~Mary Gzyra~~ C. Kouris
SUBJECT: Rooto Corp
PAN: FMI1120SB (1 hour charged for review) Case # 14327

Sample Description

Organics (VOA, ABN, Pest/PCB)		Inorganics (Metals, Cyanide)	
# 9	Low Soil	#	Low Soil
	Low Water		Low Water
	Drinking Water		Drinking Water
	Other		Other

Project Data Status _____ Completed!!

✓ Incomplete, awaiting Inorg Seal

FIT Data Review Findings:

Check Data Sheets for Transcription Errors

✓ Compounds were detected in sample(s); see enclosed sheet.

Book No. 9 Page No. _____ Date Sampled 6/12/90

0759:2

recycled paper

CK 7/29/90

Table 4-__
RESULTS OF CHEMICAL ANALYSIS OF
FIT-COLLECTED _____ SAMPLES

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	S 1	S 2	S 3	S 4	S 5	S 6	S 7	S 8	S 9	10	11	12
				Date												
				Time												
				Well Depth (Feet)												
				CRL Log Number												
				CLP Organic Traffic Report Number	EGL 52	EGL 53	EGL 54	EGL 55	EGL 56	EGL 57	EGL 58	EGL 59	EJR 23			
				CLP Inorganic Traffic Report Number												
				Temperature (°C)												
				Specific Conductivity (µmhos/cm)												
				pH												
				Compound Detected (values in µg/L or µg/kg)												
				Volatile Organics												
Gas	A,D,G,I	OCC	HH	chloromethane												
Gas	A,D,G,I	OCC	HH	bromomethane												
Gas	A,D,G,I	OCC	HH	vinyl chloride												
Gas	A,D,G,I	OCC	HH	chloroethane												
Liquid	A,D,H,I	SOL	HH,CLA	methylene chloride	8J	12J	11J	9J		8J	10J		9J			
Liquid	E,H,I,A	SOL	K,CLA	acetone	10J		32J	65J		17J	21J					
Liquid	A,H,I	SOL	SH	carbon disulfide												
Liquid	A,D,G,I	SOL	HH	1,1-dichloroethene												
Liquid	A,D,H,G	SOL	HH	1,1-dichloroethane												
Liquid	A,D,G	SOL	HH	1,2-dichloroethene (total)												
Liquid	A,D	SOL	HH	chloroform												
Liquid	A,D,G	SOL	HH	1,2-dichloroethane												
Liquid	A,E,G	SOL	K,CLA	2-butanone (MEK)												
Liquid	A,D	SOL	HH	1,1,1-trichloroethane			5J			4J	11J		8J			
Liquid	A,D	SOL	HH	carbon tetrachloride												
Liquid	A,D,G	SOL	HYD	vinyl acetate												
Liquid	A,D	OCC	HH	bromodichloromethane												
Liquid	A,D,G	SOL	HH	1,2-dichloropropane												
Liquid	A,D,G	SOL	HH	cis-1,3-dichloropropene												
Liquid	A,D,G,B	SOL	HH	trichloroethene												
Liquid	A,D	OCC	HH	dibromochloromethane												
Liquid	A,D	SOL	HH	1,1,2-trichloroethane												
Liquid	A,G	SOL	A	benzene												
Liquid	A,D,G	SOL	HH	trans-1,3-dichloropropene												
Liquid	A,D	SOL	HH,CLA	bromoform												
Liquid	A,E,G	SOL	K,CLA	4-methyl-2-pentanone												
Liquid	A,E,G	SOL	K	2-hexanone												
Liquid	A,D	SOL	HH	tetrachloroethene												
Liquid	A,G,E	SOL	A,CLA	toluene												
Liquid	A,D,E	SOL	HH	1,1,2,2-tetrachloroethane												
Liquid	A,D,G	SOL	HA	chlorobenzene												
Liquid	A,G	SOL	A	ethylbenzene												
Liquid	A,D,G	OCC	A	styrene												
Liquid	A,G	SOL	A	xylenes (total)												

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number S1	S2	S3	S4	S5	S6	S7	S8	S9	10	11	12
				Semivolatile Organics												
S, thick l	A,B,E	OCC	P	phenol												
Liquid	A,D,B	OCC	HH	bis(2-chloroethyl)ether												
Liquid	A,D,B	OCC	P	2-chlorophenol												
Liquid	A,D,H	SOL	HA	1,3-dichlorobenzene												
Solid	A,D,H	OCC	HA	1,4-dichlorobenzene												
Liquid	A,D,H	SOL	A	benzyl alcohol												
Liquid	A,D,H	OCC	HA	1,2-dichlorobenzene												
Liquid	A,B	OCC	P	2-methylphenol		1300										
	A,D	OCC	HH	bis(2-chloroisopropyl)ether												
Liquid	A,B	OCC	P	4-methylphenol												
	A	OCC	H-Amine	n-nitroso-di-n-dipropylamine												
Solid	A,D	OCC	HH	hexachloroethane												
Liquid	A,D	OCC	NA	nitrobenzene												
Liquid	A,D	OCC	H	isophorone												
Solid	A,D	OCC	P	2-nitrophenol												
Solid	A,B	OCC	P	2,4-dimethylphenol												
Solid	A	OCC	A	benzoic acid												
	A,D	OCC	HH	bis(2-chloroethoxy)methane												
Liquid	A,D	OCC	P	2,4-dichlorophenol												
Liquid	A,D	OCC	HA	1,2,4-trichlorobenzene												
Solid	A	OCC	PAH	naphthalene												
Solid	A,D	OCC	HH	4-chloroaniline												
Liquid	A,D,B	OCC	HH	hexachlorobutadiene												
Solid	A,D	OCC	P	4-chloro-3-methylphenol												
Liquid	A,D	OCC	PAH	2-methylnaphthalene												
Liquid	A,D,B	OCC	HH	hexachlorocyclopentadiene												
Solid	A,D	OCC	P	2,4,6-trichlorophenol												
Solid	A,D	OCC	P	2,4,5-trichlorophenol												
Liquid	A,D	OCC	PAH	2-chloronaphthalene												
Solid	A,D	OCC	NH	2-nitroaniline												
Liquid	A,D	OCC	PH,CLA	dimethylphthalate												
Solid	A,D	OCC	PAH	acenaphthylene												
Solid	A,D	OCC	NA	2,6-dinitrotoluene												
Solid	A,D	OCC	NH	3-nitroaniline												
Solid	A,D	OCC	PAH	acenaphthene												
Solid	A,D,G	OCC	P	2,4-dinitrophenol												
Solid	A,D	OCC	P	4-nitrophenol												
Solid	A,D	OCC	A	dibenzofuran												
Solid	A,D	OCC	NA	2,4-dinitrotoluene												
Liquid	A,D	OCC	PH	diethylphthalate												
	A,D	OCC	HH	4-chlorophenyl-phenylether												
Solid	A,D	OCC	PAH	fluorene												
Solid	A,D,E	OCC	NH	4-nitroaniline												
Solid	A,D	OCC	P	4,6-dinitro-2-methylphenol												
Solid	A,D	OCC	NH	n-nitrosodiphenylamine												
Liquid	A,D	OCC	HH	4-bromophenyl-phenylether												
Solid	A,D	OCC	HA	hexachlorobenzene												
Solid	A,D	OCC	P	pentachlorophenol												
Solid	A,D	OCC	PAH	phenanthrene												

Table 4- (Cont.)

Physical State*	Waste Characteristics**	Category***	SI Memo	Sample Collection Information and Parameters	Sample Number S 1	S 2	S 3	S 4	S 5	S 6	S 7	S 8	S 9	10	11	12
				Semivolatile Organics, Cont.												
Solid	A,D	OCC	PAH	anthracene												
Liquid	A,D	OCC	PH,CLA	di-n-butylphthalate												
Solid	A,D	OCC	PAH	fluoranthene			220 J									
Solid	A,D	OCC	PAH	pyrene			220 J									
Liquid	A,D	OCC	PH,CLA	butylbenzylphthalate												
	A,D	OCC	HA	3,3'-dichlorobenzidine												
Solid	A,D	OCC	PAH	benzo[a]anthracene												
Solid	A,D	OCC	PAH	chrysene												
Liquid	A,D	OCC	PH,CLA	bis(2-ethylhexyl)phthalate			380 J	340 J	4500	1100						
Liquid	A,D	OCC	PH,CLA	di-n-octylphthalate												
Solid	A,D	OCC	PAH	benzo[b]fluoranthene												
Solid	A,D	OCC	PAH	benzo[k]fluoranthene												
Solid	A,D,K,L	OCC	PAH	benzo[a]pyrene												
Solid	A,D	OCC	PAH	indeno[1,2,3-cd]pyrene												
Solid	A,D	OCC	PAH	dibenzo[a,h]anthracene												
Solid	A,D	OCC	PAH	benzo[g,h,i]perylene												
				Pesticides/PCBs												
Solid	A,D	PSD	PEST	alpha BHC												
Solid	A,D	PSD	PEST	beta BHC												
Solid	A,D	PSD	PEST	delta BHC												
Solid	A,D	PSD	PEST	gamma BHC (Lindane)												
Solid	A,D	PSD	PEST	Heptachlor												
Solid	A,D	PSD	PEST	Aldrin												
Solid	A,D	PSD	PEST	Heptachlor epoxide												
Solid	A,D	PSD	PEST	Endosulfan I												
Solid	A,D,E	PSD	PEST	Dieldrin												
Solid	A,D	PSD	PEST	4,4'-DDE												
Solid	A,D	PSD	PEST	Endrin												
Solid	A,D	PSD	PEST	Endosulfan II												
Solid	A,D	PSD	PEST	4,4'-DDD												
Solid	A,D	PSD	PEST	Endosulfan sulfate												
Solid	A,D	PSD	PEST	4,4'-DDT												
Solid	A,D	PSD	PEST	Methoxychlor (Mariate)												
Solid	A,D	PSD	PEST	Endrin ketone												
Solid	A,D	PSD	PEST	alpha Chlordane												
Solid	A,D	PSD	PEST	gamma Chlordane												
Solid	A,D	PSD	PEST	Toxaphene												
Liquid	A,D	OCC	PCB	Aroclor 1016												
Liquid	A,D	OCC	PCB	Aroclor 1221												
Liquid	A,D	OCC	PCB	Aroclor 1232												
Liquid	A,D	OCC	PCB	Aroclor 1242												
Liquid	A,D	OCC	PCB	Aroclor 1248												
Liquid	A,D	OCC	PCB	Aroclor 1254												
Liquid	A,D	OCC	PCB	Aroclor 1260												

Table 4- (Cont.)

COMPOUND QUALIFIERS	DEFINITION	INTERPRETATION
U	Indicates compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
J	Indicates an estimated value.	Compound value may be semiquantitative.
UJ	Quantitation limit is estimated due to a quality control (QC) protocol.	Compound was not detected if value is at CRQL, e.g., 10U UJ. If a value is reported with a UJ above CRQL and it is <5x blank concentration (10x for common laboratory artifacts), the compound is detected but may be a laboratory artifact and not attributable to the sample.
C	This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/µL in the final extract shall be confirmed by GC/MS.	Compound was confirmed by GC/MS and is quantitative. Use pesticide/PCB listed value.
B	This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	Compound value may be semiquantitative if it is <5x the blank concentration (<10x the blank concentrations for common laboratory artifacts: phthalates, methylene chloride, acetone, toluene, 2-butanone).
E	This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will <u>not</u> apply to pesticides/PCBs analyzed by GC/EC methods.	Compound value may be semiquantitative. There should be another analysis with a D qualifier, which is to be used.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.	Alerts data user to a possible change in the CRQL. Data is quantitative.
A	This flag indicates that a TIC is a suspected aldol-condensation product.	Alerts data user of a laboratory artifact in the TICs only.
R	Results are unusable due to a major violation of QC protocol.	Compound value is not usable.

ANALYTE QUALIFIERS		DEFINITION	INTERPRETATION
E	E	Estimated or not reported due to interference. See laboratory narrative.	Analyte or element was not detected, or value may be semiquantitative.
S	S	Analysis by Method of Standard Additions.	Value is quantitative.
R	N	Spike recoveries outside QC protocols, which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semi-quantitative.
*	*	Duplicate value outside QC protocols which indicates a possible matrix problem.	Value may be quantitative or semiquantitative.
+	+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value may be biased.
[ ]	B	Value is real, but is above instrument DL and below CRDL.	Value may be quantitative or semi-quantitative.
UJ		DL is estimated because of a QC protocol. DL is possibly above or below CRDL.	Compound or element was not detected.
J		Value is above CRDL and is an estimated value because of a QC protocol.	Value may be semiquantitative.
U	U	Compound was analyzed for but not detected.	Compound was not detected at or above the CRDL.
	M	Duplicate injection precision not met.	Value may be semiquantitative.
	W	Post-digestion spike for furnace AA analysis is out of control limits (35-115%), while sample absorbance is <50% of spike absorbance.	Value may be semiquantitative.
	R	Results are unusable due to a major violation of QC protocols.	Analyte value is not usable.

Source: Ecology and Environment, Inc. 1989.

DPO: [ ] ACTION [ ] FYI REGION V

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 14327 LABORATORY EMSIN

SDG NO(s). EGL52 DATA USER FIT

SOW 2/88 REVIEW COMPLETION DATE 19 July 1990

NO. OF SAMPLES Nine MATRIX Soil (SPECIFY WATER, SOIL, OR OTHER)

REVIEWER [ ] ESD [X] ESAT [X] OTHER, CONTRACT/CONTRACTOR Ronald J. Zanger

IS LABORATORY CERTIFICATION STATEMENT SIGNED? [ ] YES [ ] NO

IS DATA PACKAGE CONSISTENT WITH THE LABORATORY'S CERTIFIED NARRATIVE? [ ] YES [ ] NO

	VOA	BNA	PEST	OTHER
1. HOLDING TIMES	M	O	O	
2. GC-MS TUNE/ GC PERFORMANCE	O	O	O	
3. INITIAL CALIBRATIONS	O	O	O	
4. CONTINUING CALIBRATIONS	M	M	M	
5. FIELD BLANKS ("F" = not applicable)	F	F	F	
6. LABORATORY BLANKS	O	O	O	
7. SURROGATES	X	M	M	
8. MS/MSD	O	X	O	
9. REGIONAL QC ("F" = not applicable)	F	F	F	
10. INTERNAL STANDARDS	M	X		
11. COMPOUND IDENTIFICATION	O	O	O	
12. COMPOUND QUANTITATION	O	O	O	
13. SYSTEM PERFORMANCE	O	O		

O = No problems or minor problems that do not affect data usability.
X = No more than *about* 5% of the data points are qualified as either estimated or unusable.
M = More than *about* 5% of the data points are qualified as estimated.
Z = More than *about* 5% of the data points are qualified as unusable.
A = Used *in conjunction with* above codes to indicate that item requires DPO action.

DPO ACTION ITEMS: One semivolatile sample, EJR23, should have been reanalyzed because of surrogate outliers.

AREAS OF CONCERN: Unusual number of outliers overall, except calibrations.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 7/25/90 7/26/90

SUBJECT: Review of Region V CLP Data
Received for Review on July 18, 1990

FROM: Curtis Ross, Director (5SCRL) Patrick E. Chuille for
Central Regional Laboratory

TO: Data User: FIT

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

SITE NAME: ROOTO CORPORATION (MI) SMO Case No. 14327

EPA Data Set No. _____ No. of Samples: 9 D.U./Activity Numbers 1

CRL No. _____

SMO Traffic No. EGL52-59, EJR23

CLP Laboratory: EMSIN Hrs. Required for Review: 9.0 + 1 = 10 water

Following are our findings.

Nine (9) soil samples were determined for low-level volatile organics, semivolatile organics, and pesticides/PCB's. All the volatile organics results are estimated because of holding time noncompliance. A substantial fraction of the semivolatile organics results are estimated because of internal standard and matrix spike outliers. Some pesticide/PCB results are estimated because of calibration outliers.

The reviewer's narrative and data qualifiers follow.

Ronald J. Zanger

Ronald J. Zanger

Roy F. Weston, Inc.

19 July 1990

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

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

DATA QUALIFIERS

Contractor: EMSIN

Case/SAS number: 14327

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(1) Holding Times:

The Organic Traffic Report lists the collection date for all samples as 12 June, 1990.

All volatile organics samples were determined after the seven-day limit for the analysis of soil samples for volatile organics, but within the fourteen-day limit, after which the results would have been unusable. All volatile organics results are estimated, "J" or "UJ", for positive and negative results, respectively.

All semivolatile organics and all pesticide/PCB samples were extracted within the fourteen-day limit for the extraction of soil samples for semivolatiles and pesticides/PCB's. All semivolatile organics and pesticed/PCB extracts were determined within the forty-day limit. No problems indicated.

(2) GC/MS Tuning and Mass Calibration:

All ion abundance and percent relative abundance criteria were met, both in the bromofluorobenzene tunes for volatile organic analysis and in the decafluorotriphenylphosphine tunes for semivolatile organics analysis. No problems indicated.

(3) Calibration:

GC/MS calibration outliers are listed on the attached forms.

(4) Method Blanks:

The volatile organics method blank VBLK1 was reported to contain one TIC compound, affectin EGL52, EGL53, EGL54, EGL55, EGL57, EGL58, EJR23, EJR23MS, and EJR23MSD. The volatile organics blank VBLK2 was found to contain aceton and three TIC compounds, affecting EGL54RE, EGL56, EGL58RE, and EGL59.

The semivolatile organics method blank was reported to contain no TCL compounds and six TIC compounds. All samples are affected.

The pesticide/PCB blank, PBLK1, was reported to be free of contaminants.

Affected samples containing an amount of acetone less than, or equal to, ten times the amount of acetone found in VBLK1 are qualified "U", undetected, for acetone in that sample. Affected samples containing an amount of a TIC less than, or equal to, the five times the amount of the TIC in the associated blank are qualified "U", undetected, for that TIC in that sample.

Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 18 July 1990.

DATA QUALIFIERS

Contractor: EMSIN

Case/SAS number: 14327

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(5) Surrogate Spike Recoveries:

All volatile organics surrogate spike recoveries met contract-required QC limits with the exception of 1,2-dichloroethane-d4 in sample EGL54, EJR23MSD, and EGL54RE, for which results are estimated "J" and "UJ", for postive and negative results, respectively. The required reanalysis of EGL54 was performed for the surrogate outlier.

There were several semivolatile organics surrogate outliers. For sample EGL53 2-fluorobiphenyl was high, outside of contract-required QC limits. For sample EGL54 2-fluorobiphenyl and phenol-d6 were high, outside of contract-required QC limits, one for each of the acid and base/neutral fractions. No qualification of the data is required for one surrogate outlier per semivolatile fraction.

Below are listed the semivolatiles samples for which surrogate recoveries were high, outside of contract-required QC limits.

EJR23: nitrobenzene-d5, 2-fluorobiphenyl, terphenyl-d14, phenol-d6, 2-fluorophenol.

EJR23MS: 2-fluorobiphenyl, terphenyl-d14, phenol-d6.

EJR23MSD: nitrobenzene-d5, 2-fluorobiphenyl, phenol-d6, 2,4,6-tribromophenol.

Sample EJR23 was not reanalyzed, as required for more than one surrogate outlier per fraction. Both the acid and base/neutral fractions for sample EJR23 are estimated, "J" or "UJ", for positive and negative results, respectively.

All pesticide/PCB surrogate (dibutylchorendate) recoveries met contract-required QC limits with the exception of sample EGL53 and EGL54, which were extremely high, above contract-required QC limits. Results for samples EGL53 and EGL54 are estimated, "J" or "UJ", for positive and negative results, respectively.

(6) Matrix Spike/Matrix Spike Duplicate Recoveries:

Sample EJR23 was used for all matrix spikes.

All volatile organics matrix spikes, duplicates, and their associated RPD's met advisory QC limits with the exception of one spike recovery for 1,1-dichloroethene, which was slightly low, below advisory QC limits. No qualification of the results is required on the basis of a single matrix spike outlier.

All semivolatile organics RPD's met advisory QC limits, but sixteen matrix spikes were high, above advisory QC limits: both spikes of phenol, 2-chlorophenol, 1,4-dichlorobenzene, N-nitroso-di-n-propylamine, 1,2,4-trichlorobenzene, 4-chloro-3-methylphenol, and pentachlorophenol, and one spike each of 4-nitrophenol and 2,4-dinitrotoluene. Results in the unspiked sample, EJR23, for each of the

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Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 19 July 1990

DATA QUALIFIERS

Contractor: EMSIN

Case/SAS number: 14237

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(6) Matrix Spike/Matrix Spike Duplicate Recoveries (continued):

above compounds with both recoveries above QC limits, are estimated, "J" or "UJ", for positive and negative results, respectively.

All pesticide/PCB matrix spikes, duplicates, and their associated RPD's were within advisory QC limits.

(7) Field Blanks and Field Duplicate Samples:

No field blanks or field duplicate samples were included in this sample set.

(8) Internal Standards:

All semivolatile organics internal standards met the -50%/+100% criterion for internal standard area counts with the exception of chrysene-d12 and perylene-d12 in sample EJR23 and perylene-d12 in sample EJR23MS. In sample EJR23, analytes affected by the chrysene-d12 and perylene-d12 outliers are estimated, "J" or "UJ", for positive and negative results, respectively.

The volatile internal standard bromochloromethane was low, below, contract-required QC limits, in volatile organics samples EGL54, EGL58, EJR23MS, EJR23MSD, and EGL54RE. The internal standard 1,4-difluorobenzene was low in volatiles samples EGL58, EJR23, EJR23MS, and EJR23MSD. Chlorobenzene-d5 was low in volatiles samples EGL58, EJR23, EJR23MS, EJR23MSD, and EGL58RE. In the affected samples, analytes affected by internal standard outliers are estimated, "J" or "UJ", for positive and negative results, respectively.

Refer to Table 4, attached, for analytes associated with each internal standard.

Pesticides/PCB's:

No positive pesticide/PCB analytes were detected in the primary column analyses. Analysis with the confirmation column was not required. The evaluation below refers to the primary column only.

In the Evaluation Checks for linearity, %RSD exceeded the 10% limit for Aldrin and Endrin. Endrin and 4,4'-DDT degradation was within the 20% limit for each check. Dibutylchlorendate retention time variation was within the 0.3% limit required for capillary columns.

Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 19 July 1990

DATA QUALIFIERS

Contractor: EMSIN

Case/SAS number: 14327

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

(8) Internal Standards (continued):

Pesticides/PCB's (continued):

For the Individual Standards "A" and "B", %D exceeded the 15% limit required for quantitation for the following analytes in the listed samples. Detection limits for these analytes, in these samples, are estimated, "UJ". No positive results were reported.

Delta-BHC: EGL52, EGL53, EGL54, EGL55, EGL56, EGL57, EGL58, PBLK1.

4,4'-DDE: All samples, matrix spikes, method blank.

4,4'-DDD: All samples, matrix spikes, method blank.

4,4'-DDT: EJR23, EJR23MS, EJR23MSD, EGL56, EGL57, EGL58, EGL59.

Endosulfan sulfate: EJR23, EJR23MS, EJR23MSD, EGL56, EGL57, EGL58, EGL59.

(9) Compound Quantitation and Reported Detection Limits:

A cursory survey of the positive results reveal no errors in calculation in any fraction. Comparisons of chromatograms of positives with the results indicate that the positive values are at least in the correct range. The moisture content of the soil samples appears to have been correctly factored into the positive and negative results. No problems indicated.

(10) Other Case-Specific Problems:

Aside from a required reanalysis for a semivolatile surrogate outlier analytical requirements, mostly as they affect the report forms, appear to have been met. Some unusual items were included but do not appear to affect the results. For example, some QC data and forms were included for pesticide/PCB confirmations. These were not specifically required and, because these were incomplete and of poor QC quality, could have not have served as confirmation data in any case. Also interesting is the Continuing Calibration form included for the last point of the volatile organics five-way initial calibration. Because the standard is one of five for the initial calibration, a continuing calibration form should not have been submitted for the standard, and is not included in the Calibration Outlier tables, attached. The personnel for this contract lab appear to lack some attention to detail and to have expended some effort unnecessarily.

The extensive QC outliers are of some concern. While these are fairly typical of some soil samples the number of outliers seems unusual, particularly the semivolatile internal standards.

Reviewed by: Ronald J. Zanger

Phone: (312) 353-2960

Date: 19 July 1990

CALIBRATION OUTLIERS
VOLATILE HSL COMPOUNDS

CASE/SAS # 14237 CONTRACTOR EMSIN

Instrument # 7002	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	6/6/90 18:45			6/20/90 12:45			6/21/90 14:44								
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Chloromethane															
Bromomethane															
Vinyl Chloride															
Chloroethane															
Methylene Chloride															
Acetone	0.533	64.6	J	0.839	57.5	J									
Carbon Disulfide															
1,1-Dichloroethane															
1,1-Dichloroethene															
Trans-1,2-Dichloroethene															
Chloroform															
2-Butanone	0.142			0.194	36.9	J									
1,2-Dichloroethane															
1,1,1-Trichloroethane															
Carbon Tetrachloride															
Vinyl Acetate															
Bromodichloromethane															
1,2-Dichloropropane															
Trans-1,3-Dichloropropene															
Trichloroethene	0.636			0.850	33.6	J									
Dibromochloromethane															
1,1,2-Trichloroethane															
Benzene															
cis-1,3-Dichloropropene															
2-Chloroethylvinylether															
Bromoform															
4-Methyl-2-Pentanone															
2-Hexanone	0.337			0.431	27.6	J									
Tetrachloroethene															
1,1,2,2-Tetrachloroethane															
Toluene															
Chlorobenzene															
Ethylbenzene															
Styrene															
m-Xylene															
o/p-Xylene															

AFFECTED SAMPLES:

VBLK1	VBLE2
EGLS2, EGLS3	EGLS4 RE
EGLS4	EGLS6
EGLS5	EGLS8 RE
EGLS7	EGLS9
EGLS8	
~~EGR23~~ EJR23	
EJR23 MS	
EJR23 MSD	

Reviewer's Initials/Date: EJZ 19 July 90

EJZ 19 July 90

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

CASE/SAS # 14327 CONTRACTOR EMSIN

Instrument # 7001	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	7/13/90 9:12			7/16/90 7:57											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
Phenol															
bis(-2-Chloroethyl)Ether		-													
2-Chlorophenol															
1,3-Dichlorobenzene															
1,4-Dichlorobenzene															
Benzyl Alcohol															
1,2-Dichlorobenzene															
2-Methylphenol															
bis(2-chloroisopropyl)Ether	0.966	32.9	J	0.576	40.4	J									
4-Methylphenol															
N-Nitroso-Di-n-Propylamine	1.023			0.764	25.4	J									
Hexachloroethane															
Nitrobenzene															
Isophorone															
2-Nitrophenol															
2,4-Dimethylphenol															
Benzoic Acid															
bis(2-Chloroethoxy)Methane															
2,4-Dichlorophenol															
1,2,4-Trichlorobenzene															
Naphthalene															
4-Chloroaniline															
Hexachlorobutadiene															
4-Chloro-3-Methylphenol															
2-Methylnaphthalene															
Hexachlorocyclopentadiene															
2,4,6-Trichlorophenol								--							
2,4,5-Trichlorophenol															
2-Chloronaphthalene															
2-Nitroaniline	0.395			0.287	27.2	J									
Dimethyl Phthalate															
Acenaphthylene															
3-Nitroaniline															
Acenaphthene															
2,4-Dinitrophenol	0.133	35.2	J	0.089	33.1	J									
4-Nitrophenol	0.098			0.073	25.3	J								-	
Dibenzofuran															

AFFECTED SAMPLES:

EGLS2	SBLK1
EGLS3	EGLS5
EGLS4	EGLS7
	EGLS8
	EGLS9
	EJR23MS
	EJR23MSD
	EJR23
	EGLS6

Reviewer Initials/Date: RJZ
19 July 1990

* These flags should be applied to the analytes on the sample data sheets.

CALIBRATION OUTLIERS
SEMIVOLATILE HSL COMPOUNDS
Page 2

CASE/SAS # 14327 CONTRACTOR EMSIN

Instrument # 7001	Init. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.			Cont. Cal.		
DATE/TIME:	7/13/90 9:12			7/16/90 7:57											
	RF	%RSD	*	RF	%D	*	RF	%D	*	RF	%D	*	RF	%D	*
2,4-Dinitrotoluene		-													
2,6-Dinitrotoluene															
Diethylphthalate															
4-Chlorophenyl-phenylether															
Fluorene															
4-Nitroaniline															
4,6-Dinitro-2-Methylphenol	0.115			0.083	28.1	J									
N-Nitrosodiphenylamine															
4-Bromophenyl-phenylether															
Hexachlorobenzene															
Pentachlorophenol	0.101			0.075	26.3	J									
Phenanthrene															
Anthracene															
Di-n-Butylphthalate															
Fluoranthene															
Pyrene															
Butylbenzylphthalate															
Benzo(a)Anthracene															
bis(2-Ethylhexyl)Phthalate															
Chrysene															
Di-n-Octyl Phthalate															
Benzo(b)Fluoranthene															
Benzo(k)Fluoranthene															
Benzo(a)Pyrene															
Indeno(1,2,3-cd)Pyrene															
Dibenz(a,h)Anthracene															
Benzo(g,h,i) Perylene															

SEE PAGE 1 FOR AFFECTED SAMPLES.

* These flags should be applied to the analytes on the sample data sheets.

Reviewer's Initials/Date: RJZ 19 July 1990

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result 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 but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} = 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

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 indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract shall be confirmed by GC/MS.

2

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - 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 Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

* TABLE 4

VOLATILE INTERNAL STANDARDS WITH CORRESPONING TCL ANALYTES ASSIGNED FOR QUANTITATION

Bromochloromethane IS-1	1,4-Difluorobenzene IS-2	Chlorobenzene-d_5 IS-3
Chloromethane	2- Butanone	2-Hexanone
Bromomethane	1,1,1-Trichloroethane	4-Methyl-2-Pentanone
*Vinyl Chloride	Carbon Tetrachloride	Tetrachloroethene
Chloroethane	Vinyl Acetate	1,1,2,2-Tetrachloroethane
Methylene Chloride	Bromodichloromethane	*Toluene
Acetone	*1,2-Dichloropropane	Chlorobenzene
Carbon Disulfide	trans-1,3-Dichloropropane	*Ethylbenzene
*1,1-Dichloroethene	Trichloroethene	Styrene
1,1-Dichloroethane	Dibromochloromethane	Xylene (total)
1,2-Dichloroethene (total)	1,1,2-Trichloroethane	Bromofluorobenzene (surr)
*Chloroform	Benzene	Toluene-d_8 (surr)
1,2-Dichloroethane	cis-1,3-Dichloropropene	
1,2-Dichloroethane-d_4 (surr)	Bromoform	

(SURR)- SURROGATE COMPOUND * CALIBRATION CHECK COMPOUND

SEMIVOLATILE INTERNAL STANDARDS WITH CORRESPONDING TCL ANALYTES ASSIGNED FOR QUANTITATION

1,4-Dichlorobenzene-d_4 IS-1	Naphthalene-d_8 IS-2	Acenaphthene-d_{10} IS-3	Phenanthrene-d_{10} IS-4	Chrysene-d_{12} IS-5	Perylene-d_{12} IS-6
Phenol	Nitrobenzene	Hexachlorocyclopentadiene	4,6-Dinitro-2-methylphenol	Pyrene	Di-n-octyl Phthalate
bis(2-Chloroethyl) ether	Isophorone	2,4,6-Trichlorophenol	N-nitrosodiphenylamine	Butylbenzyl Phthalate	Benzo(b)fluoranthene
2-Chlorophenol	2-Nitrophenol	2,4,5-Trichlorophenol	1,2-Diphenylhydrazine	3,3'-Dichlorobenzidine	Benzo(k)fluoranthene
1,3-Dichlorobenzene	2,4-Dimethylphenol	2-Chloronaphthalene	4-Bromophenyl Phenyl Ether	Benzo(a)anthracene	Benzo(a)pyrene
1,4-Dichlorobenzene	Benzoic acid	2-Nitroaniline	Hexachlorobenzene	bis(2-ethylhe Phthalate	Indeno(1,2,3-cd) pyrene
Benzyl Alcohol	bis(2-Chloroethoxy)methane	Dimethyl Phthalate	Pentachlorophenol	Chrysene	Dibenz(a,h) anthracene
1,2-Dichlorobenzene	2,4-Dichlorophenol	Acenaphthylene	Phenanthrene	Terphenyl-d_{14} (surr)	Benzo(g,h,i)
2-Methylphenol	1,2,4-Trichlorobenzene	3-Nitroaniline	Anthracene		
bis(2-Chloroisopropyl)ether	Naphthalene	Acenaphthene	Di-n-butyl Phthalate		
4-Methylphenol	4-Chloroaniline	2,4-Dinitrophenol	Fluoranthene		
N-nitroso-Di-n-propylamine	Hexachlorobutadiene	4-Nitrophenol			
Hexachloroethane	4-Chloro-3-methylphenol	Dibenzofuran			
2-Fluorophenol (surr)	2-Methylnaphthalene	2,4-Dinitrotoluene			
Phenol-d_6 (surr)	Nitrobenzene-d_5 (surr)	2,6-Dinitrotoluene			
		Diethyl Phthalate			
		4-Chlorophenyl-phenyl ether			
		Fluorene			
		4-Nitroaniline			
		2-Fluorobiphenyl (surr)			
		2,4,6-Tribromo Phenol (surr)			

Surr = surrogate compound

United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

Organic Traffic Report
(For CLP Use Only)

Case Number: 14327

SAS No. (if applicable):

1. Sample Description (Enter in Column A)
   1. Surface Water
   2. Ground Water
   3. Leachate
   4. Rinsate
   5. Soil/Sediment
   6. Oil (SAS)
   7. Waste (SAS)
   8. Other (SAS) (Specify)

2. Region Number: V
Sampling Co.:
Sampler (Name):
3. Ship To:

4. Date Shipped:
Airbill Number:
Carrier:

Triple volume required for matrix spike/duplicate aqueous sample.

Ship medium and high concentration samples in paint cans.

See reverse for additional instructions.

5. Date Received: 13 JUN 90
Received by: Paula A. Smith (SMS)
Laboratory Contract Number: 68-W8-0044
Unit Price: $800.00
6. Transfer to:
Date Received:
Received by:
Contract Number:
Price:

CLP Sample Number (From labels)	(A) Sample Description (From box 1)	(B) Concentration L=low M=med H=high	(C) RAS Analysis VOA	BNA	Pest/PCB	(D) Special Handling	(E) Station Location	(F) Date/Time of Sample Collection	(G) Corresponding CLP Inorganic Sample Number	(H) Sample Condition on Receipt	(I) High Conc. Phases (Check below) Solid	Water—MIS Liq.	Non Water—MIS Liq.
EGL 52	5	L	✓	✓	✓		[illegible]	6-12-90/12:15	[illegible]	INTACT			
EGL 53	5	L	✓	✓	✓		[illegible]	6-12-90/1250	[illegible]	INTACT			
EGL 54	5	L	✓	✓	✓		[illegible]	6-12-90/1320	[illegible]	INTACT			
EGL 55	5	L	✓	✓	✓		[illegible]	6-12-90/1340	[illegible]	INTACT			
EGL 56	5	L	✓	✓	✓		[illegible]	6-12-90/1350	[illegible]	INTACT			
EGL 57	5	L	✓	✓	✓		[illegible]	6-12-90/1420	[illegible]	INTACT			
EGL 58	5	L	✓	✓	✓		[illegible]	6-12-90/1440	[illegible]	INTACT			
EGL 59	5	L	✓	✓	✓		[illegible]	6-12-90/1510	[illegible]	INTACT			
EJR 23	5	L	✓	✓	✓		[illegible]	6-12-90/1525	[illegible]	INTACT			
SB 7/17/90													

RECEIVED
JUL 18 1990
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

CASE NARRATIVE-EMSIN

EMS LABORATORIES, INDIANAPOLIS, INDIANA

CASE NUMBER 14327
SDG NUMBER ELG52

The following samples were analyzed for volatiles, semi-volatiles and pesticides/PCBs under contract 68-W8-0044.

EPA #s (EMSIN #s):
EGL52 (A208563), EGL53 (A208564), EGL54 (A208565), EGL55 (A208566), EGL56 (A208567), EGL57 (A208568), EGL58 (A208569), EGL59 (A208570), EJR23 (A208571).

Volatile analysis- EGL54 and EGL58 are reported twice because internal standard areas failed the QC criteria in both analyses. This internal standard failure probably caused high d4-dichloroethane recovery in these samples. EJR23 had internal standard problems but was not re-analyzed since it was the MS/MSD sample and the same problems were noted in these samples. DCE recovery was also high in EJR23MSD from internal standard problems.

Semi-volatile analysis- Mass 115 is used as the quant ion for 2-methyl-naphthalene because of interference with 4-chloro-3-methylphenol (which also has a mass 142). EGL54 has S8-molecular sulfur which the computer could not integrate, (reason unknown). Rather that report it in the TIC form, without a result, it is mentioned here. All samples have a 1.1 multiplier because 1.0 mL were taken for pesticide/PCBs rather than 0.5 mL. The personnel have been informed (several cases back), and this will not re-occur. Twelve spike recoveries are higher than the QC limits but the RPD's are fine. The spiking solution will be checked before it is used again to see if it has aged. The recoveries for the surrogates in EJR23 are higher than the limits but the sample was not repeated since the same was seen in its MS/MSD.

Pesticide/PCB analysis-Only pesticides which were confirmed are reported. A 30m X 0.53mm ID DB-608 column was used as the primary analysis column. The DBC % deviation are all less than 1.5 %. GPC was not performed on these samples because it was down. The column packing was replaced and system cleaned and re-calibrated. There was a lot of interference with dibutylchlorendate in EGL53 and EGL54. The % deviation for DDT, DDE and DDD exceeded the QC limits, possibly from deposits in the injection system. A false heptachlor peak in the blank was the only reason a confirmation run was needed. This peak often is a sign of phthalate contamination. All solvents and sodium sulfate will be checked for possible contamination.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Susan Brotherton

Susan Brotherton
Organic Section Leader/CLP Project Manager
July 17, 1990

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
1	VBLK1	99	102	110		0
2	EGL52	98	105	119		0
3	EGL53	104	96	119		0
4	EGL54	102	96	135 *		1
5	EGL55	99	104	121		0
6	EGL57	102	103	107		0
7	EGL58	102	100	108		0
8	EJR23	112	96	109		0
9	EJR23MS	116	89	108		0
10	EJR23MSD	112	87	134 *		1
11	VBLK2	99	100	101		0
12	EGL54 RE	103	100	149 *		1
13	EGL56	110	101	104		0
14	EGL58 RE	112	109	102		0
15	EGL59	102	104	106		0
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	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-122)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA-2 1/87 Rev.

01

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
1	EGL52	99	105	105	93	82	76		0
2	EGL53	106	120 *	111	110	100	93		1
3	EGL54	114	124 *	114	115 *	107	120		2
4	SBLK1	107	103	115	103	78	50		0
5	EGL55	101	99	104	108	96	106		0
6	EGL57	92	96	97	99	85	90		0
7	EGL58	94	92	120	97	86	52		0
8	EGL59	105	109	104	112	87	59		0
9	EJR23	131 *	129 *	165 *	137 *	124 *	103		5
10	EJR23MS	119	116 *	142 *	124 *	108	113		3
11	EJR23MSD	129 *	122 *	130	135 *	120	124 *		4
12	EGL56	96	101	93	112	93	109		0
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl-d14	(18-137)
S4 (PHL)	= Phenol-d6	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
1	PBLK1	107	
2	EGL52	95	
3	EGL53	803 *	
4	EGL54	945 *	
5	EGL55	33	
6	EGL56	97	
7	EGL57	82	
8	EGL58	96	
9	EGL59	101	
10	EJR23	106	
11	EJR23MS	103	
12	EJR23MSD	106	
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S1 (DBC) = Dibutyl chlorendate ADVISORY QC LIMITS (20-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix Spike - EPA Sample No.: EJR23 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	56.	0.	31.	56. *	59-172
Trichloroethene	56.	0.	40.	71.	62-137
Benzene	56.	0.	51.	90.	66-142
Toluene	56.	0.	55.	98.	59-139
Chlorobenzene	56.	0.	49.	87.	60-133

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	56.	35.	63.	12.	22	59-172
Trichloroethene	56.	40.	71.	0.	24	62-137
Benzene	56.	50.	90.	0.	21	66-142
Toluene	56.	54.	96.	1.	21	59-139
Chlorobenzene	56.	48.	85.	2.	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 1 out of 10 outside limits

COMMENTS:

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix Spike - EPA Sample No.: EJR23 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
Phenol	7491.	0.	9768.	130. *	26- 90
2-Chlorophenol	7491.	0.	8736.	117. *	25-102
1,4-Dichlorobenzene	3745.	0.	4438.	118. *	28-104
N-Nitroso-di-n-prop.(1)	3745.	0.	5166.	138. *	41-126
1,2,4-Trichlorobenzene	3745.	0.	4492.	120. *	38-107
4-Chloro-3-methylphenol	7491.	0.	8904.	119. *	26-103
Acenaphthene	3745.	0.	4004.	107.	31-137
4-Nitrophenol	7491.	0.	8030.	107.	11-114
2,4-Dinitrotoluene	3745.	0.	3131.	84.	28- 89
Pentachlorophenol	7491.	0.	9676.	129. *	17-109
Pyrene	3745.	0.	4981.	133.	35-142

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	7491.	10184.	136. *	4.	35	26- 90
2-Chlorophenol	7491.	8986.	120. *	3.	50	25-102
1,4-Dichlorobenzene	3745.	4451.	119. *	0.	27	28-104
N-Nitroso-di-n-prop.(1)	3745.	5203.	139. *	1.	38	41-126
1,2,4-Trichlorobenzene	3745.	4641.	124. *	3.	23	38-107
4-Chloro-3-methylphenol	7491.	8990.	120. *	1.	33	26-103
Acenaphthene	3745.	4115.	110.	3.	19	31-137
4-Nitrophenol	7491.	9354.	125. *	15.	50	11-114
2,4-Dinitrotoluene	3745.	3377.	90. *	8.	47	28- 89
Pentachlorophenol	7491.	11703.	156. *	19.	47	17-109
Pyrene	3745.	4462.	119.	11.	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 16 out of 22 outside limits

COMMENTS:

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix Spike - EPA Sample No.: EJR23 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (UG/KG)	SAMPLE CONCENTRATION (UG/KG)	MS CONCENTRATION (UG/KG)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	58.75	.00	71.96	122.	46-127
Heptachlor	58.75	.00	55.51	94.	35-130
Aldrin	58.75	.00	61.30	104.	34-132
Dieldrin	146.88	.00	157.57	107.	31-134
Endrin	146.88	.00	162.90	111.	42-139
4,4'-DDT	146.88	.00	127.35	87.	23-134

COMPOUND	SPIKE ADDED (UG/KG)	MSD CONCENTRATION (UG/KG)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	58.75	71.49	122.	1.	50	46-127
Heptachlor	58.75	59.24	101.	6.	31	35-130
Aldrin	58.75	61.30	104.	0.	43	34-132
Dieldrin	146.88	158.36	108.	0.	38	31-134
Endrin	146.88	166.58	113.	2.	45	42-139
4,4'-DDT	146.88	137.58	94.	8.	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Lab File ID: 5971D Lab Sample ID:

Date Analyzed: 6/20/90 Time Analyzed: 13:32

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 7002

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	EGL52		5973D	15:11
2	EGL53		5974D	15:59
3	EGL54		5975D	16:47
4	EGL55		5976D	17:36
5	EGL57		5978D	19:12
6	EGL58		5979D	20:01
7	EJR23		5981D	21:38
8	EJR23MS		5982D	22:26
9	EJR23MSD		5983D	23:14
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COMMENTS:

FORM IV VOA 1/87 Rev.

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Lab File ID: 5991D Lab Sample ID:

Date Analyzed: 6/21/90 Time Analyzed: 16:12

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 7002

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	EGL54 RE		5996D	20:21
2	EGL56		5997D	21:09
3	EGL58 RE		5998D	21:57
4	EGL59		5999D	22:47
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COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Lab File ID: 3100F Lab Sample ID:

Date Extracted: 6/19/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 7/16/90 Time Analyzed: 9:03

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 7001

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	EGL52		3067F	7/13/90
2	EGL53		3068F	7/13/90
3	EGL54		3069F	7/13/90
4	EGL55		3101F	7/16/90
5	EGL57		3103F	7/16/90
6	EGL58		3104F	7/16/90
7	EGL59		3107F	7/16/90
8	EJR23		3108F	7/16/90
9	EJR23MS		3109F	7/16/90
10	EJR23MSD		3110F	7/16/90
11	EGL56		3111F	7/16/90
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COMMENTS:

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Lab Sample ID: BLA-64 Lab File ID: A14

Matrix: (soil/water) SOIL Level:(low/med) LOW

Date Extracted: 6/19/90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 7/ 4/90 Date Analyzed (2): 7/13/90

Time Analyzed (1): 20:11 Time Analyzed (2): 13:14

Instrument ID (1): 9004#5 Instrument ID (2): 9004#1

GC Column ID (1): DB608 GC Column ID (2): DB-5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
1	EGL52	A208563	7/ 4/90	
2	EGL53	A208564	7/ 4/90	
3	EGL54	A208565	7/ 5/90	
4	EGL55	A208566	7/ 5/90	
5	EGL56	A208567	7/ 5/90	
6	EGL57	A208568	7/ 5/90	
7	EGL58	A208569	7/ 5/90	
8	EGL59	A208570	7/ 5/90	
9	EJR23	A208571	7/ 5/90	
10	EJR23MS	A208571	7/ 5/90	
11	EJR23MSD	A208571	7/ 5/90	
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Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5971D

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK1

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5971D

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	3.49	7.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK2

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5991D

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	23.	
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-06-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-5	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK2

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5991D

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	2.58	7.	J
2.	- -	UNKNOWN	28.24	9.	J
3.	- -	UNKNOWN	30.61	5.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL52

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5973D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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EPA SAMPLE NO.

EGL53

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5974D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 35. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	15.	U
74-83-9	Bromomethane	15.	U
75-01-4	Vinyl Chloride	15.	U
75-00-3	Chloroethane	15.	U
75-09-2	Methylene Chloride	12.	
67-64-1	Acetone	15.	U
75-15-0	Carbon Disulfide	8.	U
75-35-4	1,1-Dichloroethene	8.	U
75-34-3	1,1-Dichloroethane	8.	U
540-59-0	1,2-Dichloroethene (total)	8.	U
67-66-3	Chloroform	8.	U
107-06-2	1,2-Dichloroethane	8.	U
78-93-3	2-Butanone	15.	U
71-55-6	1,1,1-Trichloroethane	8.	U
56-23-5	Carbon Tetrachloride	8.	U
108-05-4	Vinyl Acetate	15.	U
75-27-4	Bromodichloromethane	8.	U
78-87-5	1,2-Dichloropropane	8.	U
10061-01-5	cis-1,3-Dichloropropene	8.	U
79-01-6	Trichloroethene	8.	U
124-48-1	Dibromochloromethane	8.	U
79-00-5	1,1,2-Trichloroethane	8.	U
71-43-2	Benzene	8.	U
10061-02-6	trans-1,3-Dichloropropene	8.	U
75-25-2	Bromoform	8.	U
108-10-1	4-Methyl-2-Pentanone	15.	U
591-78-6	2-Hexanone	15.	U
127-18-4	Tetrachloroethene	8.	U
79-34-5	1,1,2,2-Tetrachloroethane	8.	U
108-88-3	Toluene	8.	U
108-90-7	Chlorobenzene	8.	U
100-41-4	Ethylbenzene	8.	U
100-42-5	Styrene	8.	U
1330-20-7	Xylene (total)	8.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL53

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5974D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 35. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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EPA SAMPLE NO.

EGL54

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5975D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 10. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	11.	
67-64-1	Acetone	32.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	5.	J
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL54

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5975D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 10. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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EPA SAMPLE NO.

EGL54 RE

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5996D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 10. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	6.	U
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL54 RE

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5996D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 10. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL55

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5976D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	9.	
67-64-1	Acetone	65.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL55

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5976D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	4.14	10.	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL56

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5997D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	6.	U
67-64-1	Acetone	45.	~~B~~ U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3100F

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370.	U
111-44-4	bis(2-Chloroethyl)ether	370.	U
95-57-8	2-Chlorophenol	370.	U
541-73-1	1,3-Dichlorobenzene	370.	U
106-46-7	1,4-Dichlorobenzene	370.	U
100-51-6	Benzyl alcohol	370.	U
95-50-1	1,2-Dichlorobenzene	370.	U
95-48-7	2-Methylphenol	370.	U
108-60-1	bis(2-Chloroisopropyl)ether	370.	U
106-44-5	4-Methylphenol	370.	U
621-64-7	N-Nitroso-di-n-propylamine	370.	U
67-72-1	Hexachloroethane	370.	U
98-95-3	Nitrobenzene	370.	U
78-59-1	Isophorone	370.	U
88-75-5	2-Nitrophenol	370.	U
105-67-9	2,4-Dimethylphenol	370.	U
65-85-0	Benzoic acid	1800.	U
111-91-1	bis(2-Chloroethoxy)methane	370.	U
120-83-2	2,4-Dichlorophenol	370.	U
120-82-1	1,2,4-Trichlorobenzene	370.	U
91-20-3	Naphthalene	370.	U
106-47-8	4-Chloroaniline	370.	U
87-68-3	Hexachlorobutadiene	370.	U
59-50-7	4-Chloro-3-methylphenol	370.	U
91-57-6	2-Methylnaphthalene	370.	U
77-47-4	Hexachlorocyclopentadiene	370.	U
88-06-2	2,4,6-Trichlorophenol	370.	U
95-95-4	2,4,5-Trichlorophenol	1800.	U
91-58-7	2-Chloronaphthalene	370.	U
88-74-4	2-Nitroaniline	1800.	U
131-11-3	Dimethylphthalate	370.	U
208-96-8	Acenaphthylene	370.	U
606-20-2	2,6-Dinitrotoluene	370.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3100F

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800.	U
83-32-9	Acenaphthene	370.	U
51-28-5	2,4-Dinitrophenol	1800.	U
100-02-7	4-Nitrophenol	1800.	U
132-64-9	Dibenzofuran	370.	U
121-14-2	2,4-Dinitrotoluene	370.	U
84-66-2	Diethylphthalate	370.	U
7005-72-3	4-Chlorophenyl-phenylether	370.	U
86-73-7	Fluorene	370.	U
100-01-6	4-Nitroaniline	1800.	U
534-52-1	4,6-Dinitro-2-methylphenol	1800.	U
86-30-6	N-Nitrosodiphenylamine (1)	370.	U
101-55-3	4-Bromophenyl-phenylether	370.	U
118-74-1	Hexachlorobenzene	370.	U
87-86-5	Pentachlorophenol	1800.	U
85-01-8	Phenanthrene	370.	U
120-12-7	Anthracene	370.	U
84-74-2	Di-n-butylphthalate	370.	U
206-44-0	Fluoranthene	370.	U
129-00-0	Pyrene	370.	U
85-68-7	Butylbenzylphthalate	370.	U
91-94-1	3,3'-Dichlorobenzidine	730.	U
56-55-3	Benzo(a)anthracene	370.	U
218-01-9	Chrysene	370.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	370.	U
117-84-0	Di-n-octylphthalate	370.	U
205-99-2	Benzo(b)fluoranthene	370.	U
207-08-9	Benzo(k)fluoranthene	370.	U
50-32-8	Benzo(a)pyrene	370.	U
193-39-5	Indeno(1,2,3-cd)pyrene	370.	U
53-70-3	Dibenz(a,h)anthracene	370.	U
191-24-2	Benzo(g,h,i)perylene	370.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK1

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3100F

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.10

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	1.92	400.	J
2.	2213-23-2	HEPTANE, 2,4-DIMETHYL-	2.80	200.	J
3.	1072-05-5	HEPTANE, 2,6-DIMETHYL-	2.94	300.	J
4.	- -	UNKNOWN	3.19	1000.	J
5.	- -	UNKNOWN	13.55	300.	J
6.	- -	UNKNOWN	24.22	200.	J
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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK1

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: BLA-64

Sample wt/vol: 30. (g/mL) G Lab File ID: A14

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 4/90

GPC Cleanup: (Y/N) N pH: .0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.0	U
319-85-7	beta-BHC	8.0	U
319-86-8	delta-BHC	8.0	U
58-89-9	gamma-BHC (Lindane)	8.0	U
76-44-8	Heptachlor	8.0	U
309-00-2	Aldrin	8.0	U
1024-57-3	Heptachlor epoxide	8.0	U
959-98-8	Endosulfan I	8.0	U
60-57-1	Dieldrin	16.	U
72-55-9	4,4'-DDE	16.	U
72-20-8	Endrin	16.	U
33213-65-9	Endosulfan II	16.	U
72-54-8	4,4'-DDD	16.	U
1031-07-8	Endosulfan sulfate	16.	U
50-29-3	4,4'-DDT	16.	U
72-43-5	Methoxychlor	80.	U
53494-70-5	Endrin ketone	16.	U
5103-71-9	alpha-Chlordane	80.	U
5103-74-2	gamma-Chlordane	80.	U
8001-35-2	Toxaphene	160.	U
12674-11-2	Arochlor-1016	80.	U
11104-28-2	Arochlor-1221	80.	U
11141-16-5	Arochlor-1232	80.	U
53469-21-9	Arochlor-1242	80.	U
12672-29-6	Arochlor-1248	80.	U
11097-69-1	Arochlor-1254	160.	U
11096-82-5	Arochlor-1260	160.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL52

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5973D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	8.	
67-64-1	Acetone	10.	J
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL56

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5997D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	33.42	6.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL57

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5978D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 19. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12.	U
74-83-9	Bromomethane	12.	U
75-01-4	Vinyl Chloride	12.	U
75-00-3	Chloroethane	12.	U
75-09-2	Methylene Chloride	8.	
67-64-1	Acetone	17.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	12.	U
71-55-6	1,1,1-Trichloroethane	4.	J
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	12.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	12.	U
591-78-6	2-Hexanone	12.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL57

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5978D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 19. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	3.80	10.	J
2. - -	UNKNOWN	33.46	7.	J
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EPA SAMPLE NO.

EGL58

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5979D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	10.	
67-64-1	Acetone	21.	
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	11.	
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL58

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5979D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	3.80	20.	J
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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL58 RE

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5998D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 22. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	6.	U
67-64-1	Acetone	13.	U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL58 RE

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5998D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 22. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL59

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5999D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	13.	U
74-83-9	Bromomethane	13.	U
75-01-4	Vinyl Chloride	13.	U
75-00-3	Chloroethane	13.	U
75-09-2	Methylene Chloride	6.	U
67-64-1	Acetone	24.	~~B~~ U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	13.	U
71-55-6	1,1,1-Trichloroethane	6.	U
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	13.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	13.	U
591-78-6	2-Hexanone	13.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL59

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5999D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. Date Analyzed: 6/21/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	30.63	20.	J
2.					
3.					
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR23

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5981D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 11. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11.	U
74-83-9	Bromomethane	11.	U
75-01-4	Vinyl Chloride	11.	U
75-00-3	Chloroethane	11.	U
75-09-2	Methylene Chloride	9.	
67-64-1	Acetone	11.	U
75-15-0	Carbon Disulfide	6.	U
75-35-4	1,1-Dichloroethene	6.	U
75-34-3	1,1-Dichloroethane	6.	U
540-59-0	1,2-Dichloroethene (total)	6.	U
67-66-3	Chloroform	6.	U
107-06-2	1,2-Dichloroethane	6.	U
78-93-3	2-Butanone	11.	U
71-55-6	1,1,1-Trichloroethane	8.	
56-23-5	Carbon Tetrachloride	6.	U
108-05-4	Vinyl Acetate	11.	U
75-27-4	Bromodichloromethane	6.	U
78-87-5	1,2-Dichloropropane	6.	U
10061-01-5	cis-1,3-Dichloropropene	6.	U
79-01-6	Trichloroethene	6.	U
124-48-1	Dibromochloromethane	6.	U
79-00-5	1,1,2-Trichloroethane	6.	U
71-43-2	Benzene	6.	U
10061-02-6	trans-1,3-Dichloropropene	6.	U
75-25-2	Bromoform	6.	U
108-10-1	4-Methyl-2-Pentanone	11.	U
591-78-6	2-Hexanone	11.	U
127-18-4	Tetrachloroethene	6.	U
79-34-5	1,1,2,2-Tetrachloroethane	6.	U
108-88-3	Toluene	6.	U
108-90-7	Chlorobenzene	6.	U
100-41-4	Ethylbenzene	6.	U
100-42-5	Styrene	6.	U
1330-20-7	Xylene (total)	6.	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR23

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 5. (g/mL) G Lab File ID: 5981D

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 11. Date Analyzed: 6/20/90

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	3.59	20.	J
2.				
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL52

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3067F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/90

GPC Cleanup: (Y/N) N pH: 6.6 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	450.	U
111-44-4	bis(2-Chloroethyl)ether	450.	U
95-57-8	2-Chlorophenol	450.	U
541-73-1	1,3-Dichlorobenzene	450.	U
106-46-7	1,4-Dichlorobenzene	450.	U
100-51-6	Benzyl alcohol	450.	U
95-50-1	1,2-Dichlorobenzene	450.	U
95-48-7	2-Methylphenol	450.	U
108-60-1	bis(2-Chloroisopropyl)ether	450.	U
106-44-5	4-Methylphenol	450.	U
621-64-7	N-Nitroso-di-n-propylamine	450.	U
67-72-1	Hexachloroethane	450.	U
98-95-3	Nitrobenzene	450.	U
78-59-1	Isophorone	450.	U
88-75-5	2-Nitrophenol	450.	U
105-67-9	2,4-Dimethylphenol	450.	U
65-85-0	Benzoic acid	2200.	U
111-91-1	bis(2-Chloroethoxy)methane	450.	U
120-83-2	2,4-Dichlorophenol	450.	U
120-82-1	1,2,4-Trichlorobenzene	450.	U
91-20-3	Naphthalene	450.	U
106-47-8	4-Chloroaniline	450.	U
87-68-3	Hexachlorobutadiene	450.	U
59-50-7	4-Chloro-3-methylphenol	450.	U
91-57-6	2-Methylnaphthalene	450.	U
77-47-4	Hexachlorocyclopentadiene	450.	U
88-06-2	2,4,6-Trichlorophenol	450.	U
95-95-4	2,4,5-Trichlorophenol	2200.	U
91-58-7	2-Chloronaphthalene	450.	U
88-74-4	2-Nitroaniline	2200.	U
131-11-3	Dimethylphthalate	450.	U
208-96-8	Acenaphthylene	450.	U
606-20-2	2,6-Dinitrotoluene	450.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL52

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3067F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/90

GPC Cleanup: (Y/N) N pH: 6.6 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2200.	U
83-32-9	Acenaphthene	450.	U
51-28-5	2,4-Dinitrophenol	2200.	U
100-02-7	4-Nitrophenol	2200.	U
132-64-9	Dibenzofuran	450.	U
121-14-2	2,4-Dinitrotoluene	450.	U
84-66-2	Diethylphthalate	450.	U
7005-72-3	4-Chlorophenyl-phenylether	450.	U
86-73-7	Fluorene	450.	U
100-01-6	4-Nitroaniline	2200.	U
534-52-1	4,6-Dinitro-2-methylphenol	2200.	U
86-30-6	N-Nitrosodiphenylamine (1)	450.	U
101-55-3	4-Bromophenyl-phenylether	450.	U
118-74-1	Hexachlorobenzene	450.	U
87-86-5	Pentachlorophenol	2200.	U
85-01-8	Phenanthrene	450.	U
120-12-7	Anthracene	450.	U
84-74-2	Di-n-butylphthalate	450.	U
206-44-0	Fluoranthene	450.	U
129-00-0	Pyrene	450.	U
85-68-7	Butylbenzylphthalate	450.	U
91-94-1	3,3'-Dichlorobenzidine	890.	U
56-55-3	Benzo(a)anthracene	450.	U
218-01-9	Chrysene	450.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	450.	U
117-84-0	Di-n-octylphthalate	450.	U
205-99-2	Benzo(b)fluoranthene	450.	U
207-08-9	Benzo(k)fluoranthene	450.	U
50-32-8	Benzo(a)pyrene	450.	U
193-39-5	Indeno(1,2,3-cd)pyrene	450.	U
53-70-3	Dibenz(a,h)anthracene	450.	U
191-24-2	Benzo(g,h,i)perylene	450.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL52

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3067F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/90

GPC Cleanup: (Y/N) N pH: 6.6 Dilution Factor: 1.10

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	2213-23-2	HEPTANE, 2,4-DIMETHYL-	2.85	200.	~~BJ~~ U RJZ
2.	1072-05-5	HEPTANE, 2,6-DIMETHYL-	3.00	200.	~~BJ~~ U 19 July 90
3.	- -	UNKNOWN	3.22	2000.	J
4.	4291-79-6	CYCLOHEXANE, 1-METHYL-2-PROP	6.61	200.	J
5.	- -	UNKNOWN	24.27	200.	J
6.	10544-50-0	SULFUR MOL. (S8)	31.07	400.	J
7.	21964-49-8	1,13-TETRADECADIENE	31.15	200.	J
8.	- -	UNKNOWN	38.97	200.	J
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10.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL53

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3068F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 35. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/90

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	560.	U
111-44-4	bis(2-Chloroethyl)ether	560.	U
95-57-8	2-Chlorophenol	560.	U
541-73-1	1,3-Dichlorobenzene	560.	U
106-46-7	1,4-Dichlorobenzene	560.	U
100-51-6	Benzyl alcohol	560.	U
95-50-1	1,2-Dichlorobenzene	560.	U
95-48-7	2-Methylphenol	1300.	
108-60-1	bis(2-Chloroisopropyl)ether	560.	U
106-44-5	4-Methylphenol	560.	U
621-64-7	N-Nitroso-di-n-propylamine	560.	U
67-72-1	Hexachloroethane	560.	U
98-95-3	Nitrobenzene	560.	U
78-59-1	Isophorone	560.	U
88-75-5	2-Nitrophenol	560.	U
105-67-9	2,4-Dimethylphenol	560.	U
65-85-0	Benzoic acid	2800.	U
111-91-1	bis(2-Chloroethoxy)methane	560.	U
120-83-2	2,4-Dichlorophenol	560.	U
120-82-1	1,2,4-Trichlorobenzene	560.	U
91-20-3	Naphthalene	560.	U
106-47-8	4-Chloroaniline	560.	U
87-68-3	Hexachlorobutadiene	560.	U
59-50-7	4-Chloro-3-methylphenol	560.	U
91-57-6	2-Methylnaphthalene	560.	U
77-47-4	Hexachlorocyclopentadiene	560.	U
88-06-2	2,4,6-Trichlorophenol	560.	U
95-95-4	2,4,5-Trichlorophenol	2800.	U
91-58-7	2-Chloronaphthalene	560.	U
88-74-4	2-Nitroaniline	2800.	U
131-11-3	Dimethylphthalate	560.	U
208-96-8	Acenaphthylene	560.	U
606-20-2	2,6-Dinitrotoluene	560.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL53

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3068F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 35. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/90

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2800.	U
83-32-9	Acenaphthene	560.	U
51-28-5	2,4-Dinitrophenol	2800.	U
100-02-7	4-Nitrophenol	2800.	U
132-64-9	Dibenzofuran	560.	U
121-14-2	2,4-Dinitrotoluene	560.	U
84-66-2	Diethylphthalate	560.	U
7005-72-3	4-Chlorophenyl-phenylether	560.	U
86-73-7	Fluorene	560.	U
100-01-6	4-Nitroaniline	2800.	U
534-52-1	4,6-Dinitro-2-methylphenol	2800.	U
86-30-6	N-Nitrosodiphenylamine (1)	560.	U
101-55-3	4-Bromophenyl-phenylether	560.	U
118-74-1	Hexachlorobenzene	560.	U
87-86-5	Pentachlorophenol	2800.	U
85-01-8	Phenanthrene	560.	U
120-12-7	Anthracene	560.	U
84-74-2	Di-n-butylphthalate	560.	U
206-44-0	Fluoranthene	560.	U
129-00-0	Pyrene	560.	U
85-68-7	Butylbenzylphthalate	560.	U
91-94-1	3,3'-Dichlorobenzidine	1100.	U
56-55-3	Benzo(a)anthracene	560.	U
218-01-9	Chrysene	560.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	560.	U
117-84-0	Di-n-octylphthalate	560.	U
205-99-2	Benzo(b)fluoranthene	560.	U
207-08-9	Benzo(k)fluoranthene	560.	U
50-32-8	Benzo(a)pyrene	560.	U
193-39-5	Indeno(1,2,3-cd)pyrene	560.	U
53-70-3	Dibenz(a,h)anthracene	560.	U
191-24-2	Benzo(g,h,i)perylene	560.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL53

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3068F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 35. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/90

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 1.10

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	1.95	700.	J
2.	- -	UNKNOWN	2.03	600.	J
3.	- -	UNKNOWN	2.46	2000.	J
4.	2213-23-2	HEPTANE, 2,4-DIMETHYL-	2.85	400.	~~BJ~~ U
5.	- -	UNKNOWN HYDROCARBON	2.99	600.	J
6.	- -	UNKNOWN	3.24	3000.	J
7.	- -	UNKNOWN	3.50	1000.	J
8.	- -	UNKNOWN	3.93	800.	J
9.	- -	UNKNOWN	8.90	500.	J
10.	103-82-2	BENZENEACETIC ACID	17.38	1000.	J
11.	1002-84-2	PENTADECANOIC ACID	27.77	300.	J
12.	57-10-3	HEXADECANOIC ACID	29.63	700.	J
13.	- -	UNKNOWN	31.01	1000.	J
14.	10544-50-0	SULFUR, MOL. (S8)	31.09	3000.	J
15.	2091-29-4	9-HEXADECENOIC ACID	31.91	2000.	J
16.	57-11-4	OCTADECANOIC ACID	32.14	1000.	J
17.	- -	UNKNOWN	34.09	600.	J
18.	- -	UNKNOWN	39.94	500.	J
19.	57-88-5	CHOLESTEROL	41.90	2000.	J
20.	- -	UNKNOWN	43.59	1000.	J
21.					
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RJZ 19 July 90

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL54

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3069F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 10. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/90

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410.	U
111-44-4	bis(2-Chloroethyl)ether	410.	U
95-57-8	2-Chlorophenol	410.	U
541-73-1	1,3-Dichlorobenzene	410.	U
106-46-7	1,4-Dichlorobenzene	410.	U
100-51-6	Benzyl alcohol	410.	U
95-50-1	1,2-Dichlorobenzene	410.	U
95-48-7	2-Methylphenol	410.	U
108-60-1	bis(2-Chloroisopropyl)ether	410.	U
106-44-5	4-Methylphenol	410.	U
621-64-7	N-Nitroso-di-n-propylamine	410.	U
67-72-1	Hexachloroethane	410.	U
98-95-3	Nitrobenzene	410.	U
78-59-1	Isophorone	410.	U
88-75-5	2-Nitrophenol	410.	U
105-67-9	2,4-Dimethylphenol	410.	U
65-85-0	Benzoic acid	2000.	U
111-91-1	bis(2-Chloroethoxy)methane	410.	U
120-83-2	2,4-Dichlorophenol	410.	U
120-82-1	1,2,4-Trichlorobenzene	410.	U
91-20-3	Naphthalene	410.	U
106-47-8	4-Chloroaniline	410.	U
87-68-3	Hexachlorobutadiene	410.	U
59-50-7	4-Chloro-3-methylphenol	410.	U
91-57-6	2-Methylnaphthalene	410.	U
77-47-4	Hexachlorocyclopentadiene	410.	U
88-06-2	2,4,6-Trichlorophenol	410.	U
95-95-4	2,4,5-Trichlorophenol	2000.	U
91-58-7	2-Chloronaphthalene	410.	U
88-74-4	2-Nitroaniline	2000.	U
131-11-3	Dimethylphthalate	410.	U
208-96-8	Acenaphthylene	410.	U
606-20-2	2,6-Dinitrotoluene	410.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL54

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3069F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 10. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/90

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000.	U
83-32-9	Acenaphthene	410.	U
51-28-5	2,4-Dinitrophenol	2000.	U
100-02-7	4-Nitrophenol	2000.	U
132-64-9	Dibenzofuran	410.	U
121-14-2	2,4-Dinitrotoluene	410.	U
84-66-2	Diethylphthalate	410.	U
7005-72-3	4-Chlorophenyl-phenylether	410.	U
86-73-7	Fluorene	410.	U
100-01-6	4-Nitroaniline	2000.	U
534-52-1	4,6-Dinitro-2-methylphenol	2000.	U
86-30-6	N-Nitrosodiphenylamine (1)	410.	U
101-55-3	4-Bromophenyl-phenylether	410.	U
118-74-1	Hexachlorobenzene	410.	U
87-86-5	Pentachlorophenol	2000.	U
85-01-8	Phenanthrene	410.	U
120-12-7	Anthracene	410.	U
84-74-2	Di-n-butylphthalate	410.	U
206-44-0	Fluoranthene	220.	J
129-00-0	Pyrene	220.	J
85-68-7	Butylbenzylphthalate	410.	U
91-94-1	3,3'-Dichlorobenzidine	810.	U
56-55-3	Benzo(a)anthracene	410.	U
218-01-9	Chrysene	410.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	380.	J
117-84-0	Di-n-octylphthalate	410.	U
205-99-2	Benzo(b)fluoranthene	410.	U
207-08-9	Benzo(k)fluoranthene	410.	U
50-32-8	Benzo(a)pyrene	410.	U
193-39-5	Indeno(1,2,3-cd)pyrene	410.	U
53-70-3	Dibenz(a,h)anthracene	410.	U
191-24-2	Benzo(g,h,i)perylene	410.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL54

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3069F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 10. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/13/90

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 1.10

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	2213-23-2	HEPTANE, 2,4-DIMETHYL-	2.83	400.	~~BJ~~ U
2.	1072-05-5	HEPTANE, 2,6-DIMETHYL-	2.98	400.	~~BJ~~ U
3.	- -	UNKNOWN	3.22	2000.	J
4.	- -	UNKNOWN	24.26	300.	J
5.	- -	UNKNOWN HYDROCARBON	26.03	200.	J
6.	- -	UNKNOWN	32.14	300.	J
7.	- -	UNKNOWN HYDROCARBON	33.77	200.	J
8.					
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10.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL55

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3101F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 3.8 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	450.	U
111-44-4	bis(2-Chloroethyl)ether	450.	U
95-57-8	2-Chlorophenol	450.	U
541-73-1	1,3-Dichlorobenzene	450.	U
106-46-7	1,4-Dichlorobenzene	450.	U
100-51-6	Benzyl alcohol	450.	U
95-50-1	1,2-Dichlorobenzene	450.	U
95-48-7	2-Methylphenol	450.	U
108-60-1	bis(2-Chloroisopropyl)ether	450.	U
106-44-5	4-Methylphenol	450.	U
621-64-7	N-Nitroso-di-n-propylamine	450.	U
67-72-1	Hexachloroethane	450.	U
98-95-3	Nitrobenzene	450.	U
78-59-1	Isophorone	450.	U
88-75-5	2-Nitrophenol	450.	U
105-67-9	2,4-Dimethylphenol	450.	U
65-85-0	Benzoic acid	2200.	U
111-91-1	bis(2-Chloroethoxy)methane	450.	U
120-83-2	2,4-Dichlorophenol	450.	U
120-82-1	1,2,4-Trichlorobenzene	450.	U
91-20-3	Naphthalene	450.	U
106-47-8	4-Chloroaniline	450.	U
87-68-3	Hexachlorobutadiene	450.	U
59-50-7	4-Chloro-3-methylphenol	450.	U
91-57-6	2-Methylnaphthalene	450.	U
77-47-4	Hexachlorocyclopentadiene	450.	U
88-06-2	2,4,6-Trichlorophenol	450.	U
95-95-4	2,4,5-Trichlorophenol	2200.	U
91-58-7	2-Chloronaphthalene	450.	U
88-74-4	2-Nitroaniline	2200.	U
131-11-3	Dimethylphthalate	450.	U
208-96-8	Acenaphthylene	450.	U
606-20-2	2,6-Dinitrotoluene	450.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL55

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3101F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 3.8 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2200.	U
83-32-9	Acenaphthene	450.	U
51-28-5	2,4-Dinitrophenol	2200.	U
100-02-7	4-Nitrophenol	2200.	U
132-64-9	Dibenzofuran	450.	U
121-14-2	2,4-Dinitrotoluene	450.	U
84-66-2	Diethylphthalate	450.	U
7005-72-3	4-Chlorophenyl-phenylether	450.	U
86-73-7	Fluorene	450.	U
100-01-6	4-Nitroaniline	2200.	U
534-52-1	4,6-Dinitro-2-methylphenol	2200.	U
86-30-6	N-Nitrosodiphenylamine (1)	450.	U
101-55-3	4-Bromophenyl-phenylether	450.	U
118-74-1	Hexachlorobenzene	450.	U
87-86-5	Pentachlorophenol	2200.	U
85-01-8	Phenanthrene	450.	U
120-12-7	Anthracene	450.	U
84-74-2	Di-n-butylphthalate	450.	U
206-44-0	Fluoranthene	450.	U
129-00-0	Pyrene	450.	U
85-68-7	Butylbenzylphthalate	450.	U
91-94-1	3,3'-Dichlorobenzidine	890.	U
56-55-3	Benzo(a)anthracene	450.	U
218-01-9	Chrysene	450.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	340.	J
117-84-0	Di-n-octylphthalate	450.	U
205-99-2	Benzo(b)fluoranthene	450.	U
207-08-9	Benzo(k)fluoranthene	450.	U
50-32-8	Benzo(a)pyrene	450.	U
193-39-5	Indeno(1,2,3-cd)pyrene	450.	U
53-70-3	Dibenz(a,h)anthracene	450.	U
191-24-2	Benzo(g,h,i)perylene	450.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL55

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3101F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 3.8 Dilution Factor: 1.10

Number TICs found: 16

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	2213-23-2	HEPTANE, 2,4-DIMETHYL-	2.81	300.	~~BJ~~ U
2.	1072-05-5	HEPTANE, 2,6-DIMETHYL-	2.96	400.	~~BJ~~ U
3.	- -	UNKNOWN	3.18	1000.	J
4.	- -	UNKNOWN	24.21	300.	J
5.	54932-78-4	PHENOL, 4-(2,2,3,3-TETRAMETH	26.00	200.	J
6.	- -	UNKNOWN	26.14	300.	J
7.	57-10-3	HEXADECANOIC ACID	29.57	200.	J
8.	- -	UNKNOWN HYDROCARBON	31.38	200.	J
9.	- -	UNKNOWN	31.81	300.	J
10.	- -	UNKNOWN HYDROCARBON	32.57	200.	J
11.	- -	UNKNOWN HYDROCARBON	33.71	300.	J
12.	- -	UNKNOWN HYDROCARBON	34.80	300.	J
13.	- -	UNKNOWN HYDROCARBON	35.86	400.	J
14.	56771-77-8	4-HEXENOIC ACID, 3-METHYL-2,	36.87	300.	J
15.	- -	UNKNOWN HYDROCARBON	37.86	300.	J
16.	- -	UNKNOWN	38.93	200.	J
17.					
18.					
19.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL56

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3111F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 2.3 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	460.	U
111-44-4	bis(2-Chloroethyl)ether	460.	U
95-57-8	2-Chlorophenol	460.	U
541-73-1	1,3-Dichlorobenzene	460.	U
106-46-7	1,4-Dichlorobenzene	460.	U
100-51-6	Benzyl alcohol	460.	U
95-50-1	1,2-Dichlorobenzene	460.	U
95-48-7	2-Methylphenol	460.	U
108-60-1	bis(2-Chloroisopropyl)ether	460.	U
106-44-5	4-Methylphenol	460.	U
621-64-7	N-Nitroso-di-n-propylamine	460.	U
67-72-1	Hexachloroethane	460.	U
98-95-3	Nitrobenzene	460.	U
78-59-1	Isophorone	460.	U
88-75-5	2-Nitrophenol	460.	U
105-67-9	2,4-Dimethylphenol	460.	U
65-85-0	Benzoic acid	2300.	U
111-91-1	bis(2-Chloroethoxy)methane	460.	U
120-83-2	2,4-Dichlorophenol	460.	U
120-82-1	1,2,4-Trichlorobenzene	460.	U
91-20-3	Naphthalene	460.	U
106-47-8	4-Chloroaniline	460.	U
87-68-3	Hexachlorobutadiene	460.	U
59-50-7	4-Chloro-3-methylphenol	460.	U
91-57-6	2-Methylnaphthalene	460.	U
77-47-4	Hexachlorocyclopentadiene	460.	U
88-06-2	2,4,6-Trichlorophenol	460.	U
95-95-4	2,4,5-Trichlorophenol	2300.	U
91-58-7	2-Chloronaphthalene	460.	U
88-74-4	2-Nitroaniline	2300.	U
131-11-3	Dimethylphthalate	460.	U
208-96-8	Acenaphthylene	460.	U
606-20-2	2,6-Dinitrotoluene	460.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL56

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3111F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 2.3 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2300.	U
83-32-9	Acenaphthene	460.	U
51-28-5	2,4-Dinitrophenol	2300.	U
100-02-7	4-Nitrophenol	2300.	U
132-64-9	Dibenzofuran	460.	U
121-14-2	2,4-Dinitrotoluene	460.	U
84-66-2	Diethylphthalate	460.	U
7005-72-3	4-Chlorophenyl-phenylether	460.	U
86-73-7	Fluorene	460.	U
100-01-6	4-Nitroaniline	2300.	U
534-52-1	4,6-Dinitro-2-methylphenol	2300.	U
86-30-6	N-Nitrosodiphenylamine (1)	460.	U
101-55-3	4-Bromophenyl-phenylether	460.	U
118-74-1	Hexachlorobenzene	460.	U
87-86-5	Pentachlorophenol	2300.	U
85-01-8	Phenanthrene	460.	U
120-12-7	Anthracene	460.	U
84-74-2	Di-n-butylphthalate	460.	U
206-44-0	Fluoranthene	460.	U
129-00-0	Pyrene	460.	U
85-68-7	Butylbenzylphthalate	460.	U
91-94-1	3,3'-Dichlorobenzidine	920.	U
56-55-3	Benzo(a)anthracene	460.	U
218-01-9	Chrysene	460.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	4500.	
117-84-0	Di-n-octylphthalate	460.	U
205-99-2	Benzo(b)fluoranthene	460.	U
207-08-9	Benzo(k)fluoranthene	460.	U
50-32-8	Benzo(a)pyrene	460.	U
193-39-5	Indeno(1,2,3-cd)pyrene	460.	U
53-70-3	Dibenz(a,h)anthracene	460.	U
191-24-2	Benzo(g,h,i)perylene	460.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL56

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3111F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 2.3 Dilution Factor: 1.10

Number TICs found: 19

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	1.89	600.	J
2.	921-47-1	HEXANE, 2,3,4-TRIMETHYL-	2.81	300.	J
3.	1072-05-5	HEPTANE, 2,6-DIMETHYL-	2.95	300.	~~BJ~~ U
4.	- -	UNKNOWN	3.18	1000.	J
5.	- -	UNKNOWN	7.43	900.	J
6.	584-84-9	BENZENE, 2,4-DIISOCYANATO-1-	19.64	200.	J
7.	- -	UNKNOWN	19.79	800.	J
8.	- -	UNKNOWN	24.22	300.	J
9.	- -	UNKNOWN HYDROCARBON	35.85	200.	J
10.	- -	UNKNOWN	35.99	400.	J
11.	- -	UNKNOWN HYDROCARBON	37.85	400.	J
12.	- -	UNKNOWN	38.02	600.	J
13.	- -	UNKNOWN	38.93	200.	J
14.	- -	UNKNOWN PHTHALATE	39.57	300.	J
15.	- -	UNKNOWN PHTHALATE	39.86	300.	J
16.	- -	UNKNOWN HYDROCARBON	41.45	600.	J
17.	- -	UNKNOWN	43.56	400.	J
18.	57-10-3	HEXADECANOIC ACID	29.60	500.	J
19.	871-70-5	OCTADECANOIC ACID	32.09	400.	J
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21.					
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RJZ 19 July 90

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL57

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3103F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 19. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 2.8 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	450.	U
111-44-4	bis(2-Chloroethyl)ether	450.	U
95-57-8	2-Chlorophenol	450.	U
541-73-1	1,3-Dichlorobenzene	450.	U
106-46-7	1,4-Dichlorobenzene	450.	U
100-51-6	Benzyl alcohol	450.	U
95-50-1	1,2-Dichlorobenzene	450.	U
95-48-7	2-Methylphenol	450.	U
108-60-1	bis(2-Chloroisopropyl)ether	450.	U
106-44-5	4-Methylphenol	450.	U
621-64-7	N-Nitroso-di-n-propylamine	450.	U
67-72-1	Hexachloroethane	450.	U
98-95-3	Nitrobenzene	450.	U
78-59-1	Isophorone	450.	U
88-75-5	2-Nitrophenol	450.	U
105-67-9	2,4-Dimethylphenol	450.	U
65-85-0	Benzoic acid	2300.	U
111-91-1	bis(2-Chloroethoxy)methane	450.	U
120-83-2	2,4-Dichlorophenol	450.	U
120-82-1	1,2,4-Trichlorobenzene	450.	U
91-20-3	Naphthalene	450.	U
106-47-8	4-Chloroaniline	450.	U
87-68-3	Hexachlorobutadiene	450.	U
59-50-7	4-Chloro-3-methylphenol	450.	U
91-57-6	2-Methylnaphthalene	450.	U
77-47-4	Hexachlorocyclopentadiene	450.	U
88-06-2	2,4,6-Trichlorophenol	450.	U
95-95-4	2,4,5-Trichlorophenol	2300.	U
91-58-7	2-Chloronaphthalene	450.	U
88-74-4	2-Nitroaniline	2300.	U
131-11-3	Dimethylphthalate	450.	U
208-96-8	Acenaphthylene	450.	U
606-20-2	2,6-Dinitrotoluene	450.	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL57

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3103F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 19. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 2.8 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2300.	U
83-32-9	Acenaphthene	450.	U
51-28-5	2,4-Dinitrophenol	2300.	U
100-02-7	4-Nitrophenol	2300.	U
132-64-9	Dibenzofuran	450.	U
121-14-2	2,4-Dinitrotoluene	450.	U
84-66-2	Diethylphthalate	450.	U
7005-72-3	4-Chlorophenyl-phenylether	450.	U
86-73-7	Fluorene	450.	U
100-01-6	4-Nitroaniline	2300.	U
534-52-1	4,6-Dinitro-2-methylphenol	2300.	U
86-30-6	N-Nitrosodiphenylamine (1)	450.	U
101-55-3	4-Bromophenyl-phenylether	450.	U
118-74-1	Hexachlorobenzene	450.	U
87-86-5	Pentachlorophenol	2300.	U
85-01-8	Phenanthrene	450.	U
120-12-7	Anthracene	450.	U
84-74-2	Di-n-butylphthalate	450.	U
206-44-0	Fluoranthene	450.	U
129-00-0	Pyrene	450.	U
85-68-7	Butylbenzylphthalate	450.	U
91-94-1	3,3'-Dichlorobenzidine	910.	U
56-55-3	Benzo(a)anthracene	450.	U
218-01-9	Chrysene	450.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	1100.	
117-84-0	Di-n-octylphthalate	450.	U
205-99-2	Benzo(b)fluoranthene	450.	U
207-08-9	Benzo(k)fluoranthene	450.	U
50-32-8	Benzo(a)pyrene	450.	U
193-39-5	Indeno(1,2,3-cd)pyrene	450.	U
53-70-3	Dibenz(a,h)anthracene	450.	U
191-24-2	Benzo(g,h,i)perylene	450.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL57

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3103F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 19. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 2.8 Dilution Factor: 1.10

Number TICs found: 18

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	1.92	500.	J
2.	921-47-1	HEXANE, 2,3,4-TRIMETHYL-	2.80	300.	J
3.	1072-05-5	HEPTANE, 2,6-DIMETHYL-	2.94	400.	~~BJ~~ U
4.	- -	UNKNOWN	3.19	1000.	J
5.	- -	UNKNOWN	6.56	200.	J
6.	- -	UNKNOWN	24.22	300.	J
7.	57-10-3	HEXADECANOIC ACID	29.59	500.	J
8.	143-28-2	9-OCTADECEN-1-OL, (Z)-	31.03	2000.	J
9.	- -	UNKNOWN	31.79	900.	J
10.	- -	UNKNOWN	32.30	300.	J
11.	- -	UNKNOWN HYDROCARBON	37.86	200.	J
12.	- -	UNKNOWN HYDROCARBON	38.12	800.	J
13.	21964-49-8	1,13-TETRADECADIENE	39.15	200.	J
14.	- -	UNKNOWN	40.02	500.	J
15.	- -	UNKNOWN	40.97	400.	J
16.	- -	UNKNOWN HYDROCARBON	41.44	500.	J
17.	- -	UNKNOWN	43.10	200.	J
18.	26265-99-6	HEPTADECANOIC ACID	32.08	300.	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL58

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3104F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 22. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	470.	U
111-44-4	bis(2-Chloroethyl)ether	470.	U
95-57-8	2-Chlorophenol	470.	U
541-73-1	1,3-Dichlorobenzene	470.	U
106-46-7	1,4-Dichlorobenzene	470.	U
100-51-6	Benzyl alcohol	470.	U
95-50-1	1,2-Dichlorobenzene	470.	U
95-48-7	2-Methylphenol	470.	U
108-60-1	bis(2-Chloroisopropyl)ether	470.	U
106-44-5	4-Methylphenol	470.	U
621-64-7	N-Nitroso-di-n-propylamine	470.	U
67-72-1	Hexachloroethane	470.	U
98-95-3	Nitrobenzene	470.	U
78-59-1	Isophorone	470.	U
88-75-5	2-Nitrophenol	470.	U
105-67-9	2,4-Dimethylphenol	470.	U
65-85-0	Benzoic acid	2400.	U
111-91-1	bis(2-Chloroethoxy)methane	470.	U
120-83-2	2,4-Dichlorophenol	470.	U
120-82-1	1,2,4-Trichlorobenzene	470.	U
91-20-3	Naphthalene	470.	U
106-47-8	4-Chloroaniline	470.	U
87-68-3	Hexachlorobutadiene	470.	U
59-50-7	4-Chloro-3-methylphenol	470.	U
91-57-6	2-Methylnaphthalene	470.	U
77-47-4	Hexachlorocyclopentadiene	470.	U
88-06-2	2,4,6-Trichlorophenol	470.	U
95-95-4	2,4,5-Trichlorophenol	2400.	U
91-58-7	2-Chloronaphthalene	470.	U
88-74-4	2-Nitroaniline	2400.	U
131-11-3	Dimethylphthalate	470.	U
208-96-8	Acenaphthylene	470.	U
606-20-2	2,6-Dinitrotoluene	470.	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL58

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3104F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 22. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2400.	U
83-32-9	Acenaphthene	470.	U
51-28-5	2,4-Dinitrophenol	2400.	U
100-02-7	4-Nitrophenol	2400.	U
132-64-9	Dibenzofuran	470.	U
121-14-2	2,4-Dinitrotoluene	470.	U
84-66-2	Diethylphthalate	470.	U
7005-72-3	4-Chlorophenyl-phenylether	470.	U
86-73-7	Fluorene	470.	U
100-01-6	4-Nitroaniline	2400.	U
534-52-1	4,6-Dinitro-2-methylphenol	2400.	U
86-30-6	N-Nitrosodiphenylamine (1)	470.	U
101-55-3	4-Bromophenyl-phenylether	470.	U
118-74-1	Hexachlorobenzene	470.	U
87-86-5	Pentachlorophenol	2400.	U
85-01-8	Phenanthrene	470.	U
120-12-7	Anthracene	470.	U
84-74-2	Di-n-butylphthalate	470.	U
206-44-0	Fluoranthene	470.	U
129-00-0	Pyrene	470.	U
85-68-7	Butylbenzylphthalate	470.	U
91-94-1	3,3'-Dichlorobenzidine	940.	U
56-55-3	Benzo(a)anthracene	470.	U
218-01-9	Chrysene	470.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	470.	U
117-84-0	Di-n-octylphthalate	470.	U
205-99-2	Benzo(b)fluoranthene	470.	U
207-08-9	Benzo(k)fluoranthene	470.	U
50-32-8	Benzo(a)pyrene	470.	U
193-39-5	Indeno(1,2,3-cd)pyrene	470.	U
53-70-3	Dibenz(a,h)anthracene	470.	U
191-24-2	Benzo(g,h,i)perylene	470.	U

(1) - Cannot be separated from diphenylamine

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL58

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3104F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 22. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.10

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	1.77	500.	J
2.	- -	UNKNOWN	1.89	400.	J
3.	2213-23-2	HEPTANE, 2,4-DIMETHYL-	2.81	200.	~~BJ~~ U
4.	1072-05-5	HEPTANE, 2,6-DIMETHYL-	2.96	300.	~~BJ~~ U
5.	- -	UNKNOWN	3.18	1000.	J
6.	- -	UNKNOWN	24.22	200.	J
7.	- -	UNKNOWN	36.38	200.	J
8.	638-66-4	OCTADECANAL	39.16	300.	J
9.	36653-82-4	1-HEXADECANOL	40.00	700.	J
10.	- -	UNKNOWN HYDROCARBON	41.45	500.	J
11.	- -	UNKNOWN	43.62	900.	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL59

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3107F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 5.2 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	460.	U
111-44-4	bis(2-Chloroethyl)ether	460.	U
95-57-8	2-Chlorophenol	460.	U
541-73-1	1,3-Dichlorobenzene	460.	U
106-46-7	1,4-Dichlorobenzene	460.	U
100-51-6	Benzyl alcohol	460.	U
95-50-1	1,2-Dichlorobenzene	460.	U
95-48-7	2-Methylphenol	460.	U
108-60-1	bis(2-Chloroisopropyl)ether	460.	U
106-44-5	4-Methylphenol	460.	U
621-64-7	N-Nitroso-di-n-propylamine	460.	U
67-72-1	Hexachloroethane	460.	U
98-95-3	Nitrobenzene	460.	U
78-59-1	Isophorone	460.	U
88-75-5	2-Nitrophenol	460.	U
105-67-9	2,4-Dimethylphenol	460.	U
65-85-0	Benzoic acid	2300.	U
111-91-1	bis(2-Chloroethoxy)methane	460.	U
120-83-2	2,4-Dichlorophenol	460.	U
120-82-1	1,2,4-Trichlorobenzene	460.	U
91-20-3	Naphthalene	460.	U
106-47-8	4-Chloroaniline	460.	U
87-68-3	Hexachlorobutadiene	460.	U
59-50-7	4-Chloro-3-methylphenol	460.	U
91-57-6	2-Methylnaphthalene	460.	U
77-47-4	Hexachlorocyclopentadiene	460.	U
88-06-2	2,4,6-Trichlorophenol	460.	U
95-95-4	2,4,5-Trichlorophenol	2300.	U
91-58-7	2-Chloronaphthalene	460.	U
88-74-4	2-Nitroaniline	2300.	U
131-11-3	Dimethylphthalate	460.	U
208-96-8	Acenaphthylene	460.	U
606-20-2	2,6-Dinitrotoluene	460.	U

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL59

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3107F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 5.2 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2300.	U
83-32-9	Acenaphthene	460.	U
51-28-5	2,4-Dinitrophenol	2300.	U
100-02-7	4-Nitrophenol	2300.	U
132-64-9	Dibenzofuran	460.	U
121-14-2	2,4-Dinitrotoluene	460.	U
84-66-2	Diethylphthalate	460.	U
7005-72-3	4-Chlorophenyl-phenylether	460.	U
86-73-7	Fluorene	460.	U
100-01-6	4-Nitroaniline	2300.	U
534-52-1	4,6-Dinitro-2-methylphenol	2300.	U
86-30-6	N-Nitrosodiphenylamine (1)	460.	U
101-55-3	4-Bromophenyl-phenylether	460.	U
118-74-1	Hexachlorobenzene	460.	U
87-86-5	Pentachlorophenol	2300.	U
85-01-8	Phenanthrene	460.	U
120-12-7	Anthracene	460.	U
84-74-2	Di-n-butylphthalate	460.	U
206-44-0	Fluoranthene	460.	U
129-00-0	Pyrene	460.	U
85-68-7	Butylbenzylphthalate	460.	U
91-94-1	3,3'-Dichlorobenzidine	920.	U
56-55-3	Benzo(a)anthracene	460.	U
218-01-9	Chrysene	460.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	460.	U
117-84-0	Di-n-octylphthalate	460.	U
205-99-2	Benzo(b)fluoranthene	460.	U
207-08-9	Benzo(k)fluoranthene	460.	U
50-32-8	Benzo(a)pyrene	460.	U
193-39-5	Indeno(1,2,3-cd)pyrene	460.	U
53-70-3	Dibenz(a,h)anthracene	460.	U
191-24-2	Benzo(g,h,i)perylene	460.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EGL59

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3107F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 5.2 Dilution Factor: 1.10

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	2.30	200.	J
2.	2213-23-2	HEPTANE, 2,4-DIMETHYL-	2.81	200.	~~BJ~~ U
3.	1072-05-5	HEPTANE, 2,6-DIMETHYL-	2.95	300.	~~BJ~~ U
4.	- -	UNKNOWN	3.18	2000.	J
5.	- -	UNKNOWN	24.22	300.	J
6.	54699-42-2	CYCLOHEXANAMINE, N-CYCLOOCTY	38.15	300.	J
7.	71899-38-2	9-EICOSYNE	39.16	400.	J
8.	- -	UNKNOWN	40.00	1000.	J
9.	- -	UNKNOWN HYDROCARBON	41.45	500.	J
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR23

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3108F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 11. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 4.4 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	410.	U
111-44-4	bis(2-Chloroethyl)ether	410.	U
95-57-8	2-Chlorophenol	410.	U
541-73-1	1,3-Dichlorobenzene	410.	U
106-46-7	1,4-Dichlorobenzene	410.	U
100-51-6	Benzyl alcohol	410.	U
95-50-1	1,2-Dichlorobenzene	410.	U
95-48-7	2-Methylphenol	410.	U
108-60-1	bis(2-Chloroisopropyl)ether	410.	U
106-44-5	4-Methylphenol	410.	U
621-64-7	N-Nitroso-di-n-propylamine	410.	U
67-72-1	Hexachloroethane	410.	U
98-95-3	Nitrobenzene	410.	U
78-59-1	Isophorone	410.	U
88-75-5	2-Nitrophenol	410.	U
105-67-9	2,4-Dimethylphenol	410.	U
65-85-0	Benzoic acid	2100.	U
111-91-1	bis(2-Chloroethoxy)methane	410.	U
120-83-2	2,4-Dichlorophenol	410.	U
120-82-1	1,2,4-Trichlorobenzene	410.	U
91-20-3	Naphthalene	410.	U
106-47-8	4-Chloroaniline	410.	U
87-68-3	Hexachlorobutadiene	410.	U
59-50-7	4-Chloro-3-methylphenol	410.	U
91-57-6	2-Methylnaphthalene	410.	U
77-47-4	Hexachlorocyclopentadiene	410.	U
88-06-2	2,4,6-Trichlorophenol	410.	U
95-95-4	2,4,5-Trichlorophenol	2100.	U
91-58-7	2-Chloronaphthalene	410.	U
88-74-4	2-Nitroaniline	2100.	U
131-11-3	Dimethylphthalate	410.	U
208-96-8	Acenaphthylene	410.	U
606-20-2	2,6-Dinitrotoluene	410.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR23

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3108F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 11. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 4.4 Dilution Factor: 1.10

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2100.	U
83-32-9	Acenaphthene	410.	U
51-28-5	2,4-Dinitrophenol	2100.	U
100-02-7	4-Nitrophenol	2100.	U
132-64-9	Dibenzofuran	410.	U
121-14-2	2,4-Dinitrotoluene	410.	U
84-66-2	Diethylphthalate	410.	U
7005-72-3	4-Chlorophenyl-phenylether	410.	U
86-73-7	Fluorene	410.	U
100-01-6	4-Nitroaniline	2100.	U
534-52-1	4,6-Dinitro-2-methylphenol	2100.	U
86-30-6	N-Nitrosodiphenylamine (1)	410.	U
101-55-3	4-Bromophenyl-phenylether	410.	U
118-74-1	Hexachlorobenzene	410.	U
87-86-5	Pentachlorophenol	2100.	U
85-01-8	Phenanthrene	410.	U
120-12-7	Anthracene	410.	U
84-74-2	Di-n-butylphthalate	410.	U
206-44-0	Fluoranthene	410.	U
129-00-0	Pyrene	410.	U
85-68-7	Butylbenzylphthalate	410.	U
91-94-1	3,3'-Dichlorobenzidine	820.	U
56-55-3	Benzo(a)anthracene	410.	U
218-01-9	Chrysene	410.	U
117-81-7	Bis(2-Ethylhexyl)phthalate	410.	U
117-84-0	Di-n-octylphthalate	410.	U
205-99-2	Benzo(b)fluoranthene	410.	U
207-08-9	Benzo(k)fluoranthene	410.	U
50-32-8	Benzo(a)pyrene	410.	U
193-39-5	Indeno(1,2,3-cd)pyrene	410.	U
53-70-3	Dibenz(a,h)anthracene	410.	U
191-24-2	Benzo(g,h,i)perylene	410.	U

(1) - Cannot be separated from diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EJR23

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID:

Sample wt/vol: 30. (g/mL) G Lab File ID: 3108F

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 11. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/16/90

GPC Cleanup: (Y/N) N pH: 4.4 Dilution Factor: 1.10

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	1.77	600.	J
2.	- -	UNKNOWN	1.89	500.	J
3.	2213-23-2	HEPTANE, 2,4-DIMETHYL-	2.81	300.	~~BJ~~ U
4.	1072-05-5	HEPTANE, 2,6-DIMETHYL-	2.95	400.	~~BJ~~ U
5.	- -	UNKNOWN	3.18	2000.	J
6.	- -	UNKNOWN	24.21	200.	J
7.	5353-25-3	ETHANOL, 2-(9-OCTADECENYLOXY	30.98	400.	J
8.	- -	UNKNOWN	31.84	400.	J
9.	56554-86-0	17-OCTADECENAL	35.12	300.	J
10.	25117-35-5	OCTADECANE, 5-METHYL-	35.86	200.	J
11.	295-65-8	CYCLOHEXADECANE	36.04	1000.	J
12.	- -	UNKNOWN	36.19	300.	J
13.	56554-93-9	15-OCTADECENAL	37.21	300.	J
14.	- -	UNKNOWN HYDROCARBON	37.85	300.	J
15.	112-88-9	1-OCTADECENE	38.08	1000.	J
16.	56554-93-9	15-OCTADECENAL	39.15	300.	J
17.	- -	UNKNOWN	40.03	300.	J
18.	56554-92-8	10-OCTADECENAL	40.95	300.	J
19.	- -	UNKNOWN HYDROCARBON	41.45	500.	J
20.	- -	UNKNOWN	42.66	200.	J
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

LJZ 19 July 9

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL52

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: A208563

Sample wt/vol: 30. (g/mL) G Lab File ID: A15

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 4/90

GPC Cleanup: (Y/N) N pH: 6.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10.	U
319-85-7	beta-BHC	10.	U
319-86-8	delta-BHC	10.	U
58-89-9	gamma-BHC (Lindane)	10.	U
76-44-8	Heptachlor	10.	U
309-00-2	Aldrin	10.	U
1024-57-3	Heptachlor epoxide	10.	U
959-98-8	Endosulfan I	10.	U
60-57-1	Dieldrin	19.	U
72-55-9	4,4'-DDE	19.	U
72-20-8	Endrin	19.	U
33213-65-9	Endosulfan II	19.	U
72-54-8	4,4'-DDD	19.	U
1031-07-8	Endosulfan sulfate	19.	U
50-29-3	4,4'-DDT	19.	U
72-43-5	Methoxychlor	97.	U
53494-70-5	Endrin ketone	19.	U
5103-71-9	alpha-Chlordane	97.	U
5103-74-2	gamma-Chlordane	97.	U
8001-35-2	Toxaphene	190.	U
12674-11-2	Arochlor-1016	97.	U
11104-28-2	Arochlor-1221	97.	U
11141-16-5	Arochlor-1232	97.	U
53469-21-9	Arochlor-1242	97.	U
12672-29-6	Arochlor-1248	97.	U
11097-69-1	Arochlor-1254	190.	U
11096-82-5	Arochlor-1260	190.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL53

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: A208564

Sample wt/vol: 30. (g/mL) G Lab File ID: A17

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 35. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 4/90

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	12.	U
319-85-7	beta-BHC	12.	U
319-86-8	delta-BHC	12.	U
58-89-9	gamma-BHC (Lindane)	12.	U
76-44-8	Heptachlor	12.	U
309-00-2	Aldrin	12.	U
1024-57-3	Heptachlor epoxide	12.	U
959-98-8	Endosulfan I	12.	U
60-57-1	Dieldrin	24.	U
72-55-9	4,4'-DDE	24.	U
72-20-8	Endrin	24.	U
33213-65-9	Endosulfan II	24.	U
72-54-8	4,4'-DDD	24.	U
1031-07-8	Endosulfan sulfate	24.	U
50-29-3	4,4'-DDT	24.	U
72-43-5	Methoxychlor	120.	U
53494-70-5	Endrin ketone	24.	U
5103-71-9	alpha-Chlordane	120.	U
5103-74-2	gamma-Chlordane	120.	U
8001-35-2	Toxaphene	240.	U
12674-11-2	Arochlor-1016	120.	U
11104-28-2	Arochlor-1221	120.	U
11141-16-5	Arochlor-1232	120.	U
53469-21-9	Arochlor-1242	120.	U
12672-29-6	Arochlor-1248	120.	U
11097-69-1	Arochlor-1254	240.	U
11096-82-5	Arochlor-1260	240.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL54

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: A208565

Sample wt/vol: 30. (g/mL) G Lab File ID: A20

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 10. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 5/90

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 10.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	89.	U
319-85-7	beta-BHC	89.	U
319-86-8	delta-BHC	89.	U
58-89-9	gamma-BHC (Lindane)	89.	U
76-44-8	Heptachlor	89.	U
309-00-2	Aldrin	89.	U
1024-57-3	Heptachlor epoxide	89.	U
959-98-8	Endosulfan I	89.	U
60-57-1	Dieldrin	180.	U
72-55-9	4,4'-DDE	180.	U
72-20-8	Endrin	180.	U
33213-65-9	Endosulfan II	180.	U
72-54-8	4,4'-DDD	180.	U
1031-07-8	Endosulfan sulfate	180.	U
50-29-3	4,4'-DDT	180.	U
72-43-5	Methoxychlor	890.	U
53494-70-5	Endrin ketone	180.	U
5103-71-9	alpha-Chlordane	890.	U
5103-74-2	gamma-Chlordane	890.	U
8001-35-2	Toxaphene	1800.	U
12674-11-2	Arochlor-1016	890.	U
11104-28-2	Arochlor-1221	890.	U
11141-16-5	Arochlor-1232	890.	U
53469-21-9	Arochlor-1242	890.	U
12672-29-6	Arochlor-1248	890.	U
11097-69-1	Arochlor-1254	1800.	U
11096-82-5	Arochlor-1260	1800.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL55

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: A208566

Sample wt/vol: 30. (g/mL) G Lab File ID: A22

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 18. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 5/90

GPC Cleanup: (Y/N) N pH: 3.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10.	U
319-85-7	beta-BHC	10.	U
319-86-8	delta-BHC	10.	U
58-89-9	gamma-BHC (Lindane)	10.	U
76-44-8	Heptachlor	10.	U
309-00-2	Aldrin	10.	U
1024-57-3	Heptachlor epoxide	10.	U
959-98-8	Endosulfan I	10.	U
60-57-1	Dieldrin	19.	U
72-55-9	4,4'-DDE	19.	U
72-20-8	Endrin	19.	U
33213-65-9	Endosulfan II	19.	U
72-54-8	4,4'-DDD	19.	U
1031-07-8	Endosulfan sulfate	19.	U
50-29-3	4,4'-DDT	19.	U
72-43-5	Methoxychlor	97.	U
53494-70-5	Endrin ketone	19.	U
5103-71-9	alpha-Chlordane	97.	U
5103-74-2	gamma-Chlordane	97.	U
8001-35-2	Toxaphene	190.	U
12674-11-2	Arochlor-1016	97.	U
11104-28-2	Arochlor-1221	97.	U
11141-16-5	Arochlor-1232	97.	U
53469-21-9	Arochlor-1242	97.	U
12672-29-6	Arochlor-1248	97.	U
11097-69-1	Arochlor-1254	190.	U
11096-82-5	Arochlor-1260	190.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL56

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: A208567

Sample wt/vol: 30. (g/mL) G Lab File ID: A27

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 5/90

GPC Cleanup: (Y/N) N pH: 2.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10.	U
319-85-7	beta-BHC	10.	U
319-86-8	delta-BHC	10.	U
58-89-9	gamma-BHC (Lindane)	10.	U
76-44-8	Heptachlor	10.	U
309-00-2	Aldrin	10.	U
1024-57-3	Heptachlor epoxide	10.	U
959-98-8	Endosulfan I	10.	U
60-57-1	Dieldrin	20.	U
72-55-9	4,4'-DDE	20.	U
72-20-8	Endrin	20.	U
33213-65-9	Endosulfan II	20.	U
72-54-8	4,4'-DDD	20.	U
1031-07-8	Endosulfan sulfate	20.	U
50-29-3	4,4'-DDT	20.	U
72-43-5	Methoxychlor	100.	U
53494-70-5	Endrin ketone	20.	U
5103-71-9	alpha-Chlordane	100.	U
5103-74-2	gamma-Chlordane	100.	U
8001-35-2	Toxaphene	200.	U
12674-11-2	Arochlor-1016	100.	U
11104-28-2	Arochlor-1221	100.	U
11141-16-5	Arochlor-1232	100.	U
53469-21-9	Arochlor-1242	100.	U
12672-29-6	Arochlor-1248	100.	U
11097-69-1	Arochlor-1254	200.	U
11096-82-5	Arochlor-1260	200.	U

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL57

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: A208568

Sample wt/vol: 30. (g/mL) G Lab File ID: A32

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 19. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 5/90

GPC Cleanup: (Y/N) N pH: 2.8 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10.	U
319-85-7	beta-BHC	10.	U
319-86-8	delta-BHC	10.	U
58-89-9	gamma-BHC (Lindane)	10.	U
76-44-8	Heptachlor	10.	U
309-00-2	Aldrin	10.	U
1024-57-3	Heptachlor epoxide	10.	U
959-98-8	Endosulfan I	10.	U
60-57-1	Dieldrin	20.	U
72-55-9	4,4'-DDE	20.	U
72-20-8	Endrin	20.	U
33213-65-9	Endosulfan II	20.	U
72-54-8	4,4'-DDD	20.	U
1031-07-8	Endosulfan sulfate	20.	U
50-29-3	4,4'-DDT	20.	U
72-43-5	Methoxychlor	99.	U
53494-70-5	Endrin ketone	20.	U
5103-71-9	alpha-Chlordane	99.	U
5103-74-2	gamma-Chlordane	99.	U
8001-35-2	Toxaphene	200.	U
12674-11-2	Arochlor-1016	99.	U
11104-28-2	Arochlor-1221	99.	U
11141-16-5	Arochlor-1232	99.	U
53469-21-9	Arochlor-1242	99.	U
12672-29-6	Arochlor-1248	99.	U
11097-69-1	Arochlor-1254	200.	U
11096-82-5	Arochlor-1260	200.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL58

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: A208569

Sample wt/vol: 30. (g/mL) G Lab File ID: A34

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 22. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 5/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10.	U
319-85-7	beta-BHC	10.	U
319-86-8	delta-BHC	10.	U
58-89-9	gamma-BHC (Lindane)	10.	U
76-44-8	Heptachlor	10.	U
309-00-2	Aldrin	10.	U
1024-57-3	Heptachlor epoxide	10.	U
959-98-8	Endosulfan I	10.	U
60-57-1	Dieldrin	21.	U
72-55-9	4,4'-DDE	21.	U
72-20-8	Endrin	21.	U
33213-65-9	Endosulfan II	21.	U
72-54-8	4,4'-DDD	21.	U
1031-07-8	Endosulfan sulfate	21.	U
50-29-3	4,4'-DDT	21.	U
72-43-5	Methoxychlor	100.	U
53494-70-5	Endrin ketone	21.	U
5103-71-9	alpha-Chlordane	100.	U
5103-74-2	gamma-Chlordane	100.	U
8001-35-2	Toxaphene	210.	U
12674-11-2	Arochlor-1016	100.	U
11104-28-2	Arochlor-1221	100.	U
11141-16-5	Arochlor-1232	100.	U
53469-21-9	Arochlor-1242	100.	U
12672-29-6	Arochlor-1248	100.	U
11097-69-1	Arochlor-1254	210.	U
11096-82-5	Arochlor-1260	210.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EGL59

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: A208570

Sample wt/vol: 30. (g/mL) G Lab File ID: A38

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 20. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 5/90

GPC Cleanup: (Y/N) N pH: 5.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10.	U
319-85-7	beta-BHC	10.	U
319-86-8	delta-BHC	10.	U
58-89-9	gamma-BHC (Lindane)	10.	U
76-44-8	Heptachlor	10.	U
309-00-2	Aldrin	10.	U
1024-57-3	Heptachlor epoxide	10.	U
959-98-8	Endosulfan I	10.	U
60-57-1	Dieldrin	20.	U
72-55-9	4,4'-DDE	20.	U
72-20-8	Endrin	20.	U
33213-65-9	Endosulfan II	20.	U
72-54-8	4,4'-DDD	20.	U
1031-07-8	Endosulfan sulfate	20.	U
50-29-3	4,4'-DDT	20.	U
72-43-5	Methoxychlor	100.	U
53494-70-5	Endrin ketone	20.	U
5103-71-9	alpha-Chlordane	100.	U
5103-74-2	gamma-Chlordane	100.	U
8001-35-2	Toxaphene	200.	U
12674-11-2	Arochlor-1016	100.	U
11104-28-2	Arochlor-1221	100.	U
11141-16-5	Arochlor-1232	100.	U
53469-21-9	Arochlor-1242	100.	U
12672-29-6	Arochlor-1248	100.	U
11097-69-1	Arochlor-1254	200.	U
11096-82-5	Arochlor-1260	200.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EJR23

Lab Name: EMSIN Contract: 68-W8-0044

Lab Code: EMSIN Case No.: 14327 SAS No.: SDG No.: EGL52

Matrix: (soil/water) SOIL Lab Sample ID: A208571

Sample wt/vol: 31. (g/mL) G Lab File ID: A40

Level: (low/med) LOW Date Received: 6/13/90

% Moisture: not dec. 11. dec. 0. Date Extracted: 6/19/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 7/ 5/90

GPC Cleanup: (Y/N) N pH: 4.4 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.8	U
319-85-7	beta-BHC	8.8	U
319-86-8	delta-BHC	8.8	U
58-89-9	gamma-BHC (Lindane)	8.8	U
76-44-8	Heptachlor	8.8	U
309-00-2	Aldrin	8.8	U
1024-57-3	Heptachlor epoxide	8.8	U
959-98-8	Endosulfan I	8.8	U
60-57-1	Dieldrin	18.	U
72-55-9	4,4'-DDE	18.	U
72-20-8	Endrin	18.	U
33213-65-9	Endosulfan II	18.	U
72-54-8	4,4'-DDD	18.	U
1031-07-8	Endosulfan sulfate	18.	U
50-29-3	4,4'-DDT	18.	U
72-43-5	Methoxychlor	88.	U
53494-70-5	Endrin ketone	18.	U
5103-71-9	alpha-Chlordane	88.	U
5103-74-2	gamma-Chlordane	88.	U
8001-35-2	Toxaphene	180.	U
12674-11-2	Arochlor-1016	88.	U
11104-28-2	Arochlor-1221	88.	U
11141-16-5	Arochlor-1232	88.	U
53469-21-9	Arochlor-1242	88.	U
12672-29-6	Arochlor-1248	88.	U
11097-69-1	Arochlor-1254	180.	U
11096-82-5	Arochlor-1260	180.	U