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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
CENTRAL REGIONAL LABORATORY
839 BESTGATE ROAD
ANNAPOLIS, MARYLAND 21401
(301) 266-9180

DATE: 11-27-90

SUBJECT: Region III CLP Data QA Review

TO: Quality Assurance Officer, AOB (OS-230)

FROM: Patricia J. Krantz, Quality Assurance Chief, Region III (3ES23)

Attached is a Region III CLP Data Review by reviewers at CH2M HILL.

CASE NO: 14797

SITE: Raymark

SDG NO: CBH23

LABORATORY: Weyerhaeuser

REVIEWERS: Dean R. Charpentier
Koumudi Ketkar

Attachment

cc: Mike Towle, EPA RPM
Edward Kantor, EMSL-LV
Gerald Muth, Region X DPO
Jay Vandeven, CH2M HILL Site Manager

MEMORANDUM

TO: Mike Towle/EPA RPM

COPIES: Claudia Walters/EPA (3ES23) QA Section
Joe Cleary/CH2M HILL

FROM: Dean R. Charpentier/CH2M HILL
Koumudi Ketkar/CH2M HILL

DATE: November 13, 1990

RE: Organic Data Validation for RAS Case 14797, SDG CBH23

PROJECT: Raymark

OVERVIEW

This data validation report discusses the quality of the data generated from the Raymark Site. The samples collected on August 28 and 30, 1990, were designated as Case 14797. The case consists of Organic Sample Delivery Group (SDG) CBH23 which includes 8 water samples (including a field duplicate, 2 field blanks and a trip blank) and 3 soil samples for a total of 11 samples. All samples, except the trip blank, were analyzed for semivolatiles and pesticides. Volatile analysis was performed on the three soil samples, the trip blank, and one field blank. These samples were analyzed through the Contract Laboratory Program (CLP) Routine Analytical Services (RAS) for organics. The requested analyses were performed using approved EPA methodology.

SUMMARY

All the Target Compound List (TCL) organics were successfully analyzed. Areas of concern are listed below under major and minor problems.

I. MAJOR PROBLEMS

No major problems were encountered during the analyses.

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II. MINOR PROBLEMS

Volatiles

1. The volatile continuing calibration standards yielded several percent differences (%D) greater than the control limit of 25 percent. For the continuing calibration performed on September 5, 1990, the following compounds did not meet the QC criteria: 2-butanone (28.8%) and 2-hexanone (31.8%). A number of compounds did not meet QC criteria for the continuing calibration of September 10, 1990. These compounds include chloromethane (45.9%), acetone (40.75%), 1,2-dichloroethane (33.3%), 1,1,1-trichloroethane (29.09%), carbon tetrachloride (52.5%), bromodichloromethane (26.84%), dibromochloromethane (26.7%), and bromoform (36.7%). All the positive results were qualified as estimated J, and all the nondetects were qualified UJ.

2. The soils method blank of September 9, 1990, was contaminated with 14 ug/kg acetone. All associated sample results less than ten (10) times the method blank concentration were qualified as possibly blank contaminated B.

Semivolatiles

1. The holding time for soil samples extraction was exceeded for semivolatile analysis. Using professional judgement, all positive results for these samples were qualified as estimated J and all nondetects were qualified as estimated UJ. It should be noted that the SOW of 2/88 has a specific requirement of holding times for extractables of ten days verified time of sample receipt (VTSR) for soils and five days of VTSR for water samples, while the Functional Guidelines state that semivolatile water samples must be extracted within seven days.

2. For the semivolatile initial calibration of October 1, 1990, the relative standard deviation (%RSD) for 3,3-dichlorobenzidine (52.7%) exceeded the QC criteria of <30%. The initial calibration on a different instrument also produced %RSD outliers: 3-nitroaniline (41.4%) and 3,3-dichlorobenzidine (55.2%). There were no positive results for these compounds and all the nondetect data were qualified UJ.

3. A number of semivolatile compounds exceeded the continuing calibration (25% difference) quality control limit. These compounds can be found in Appendix F. All the positive results were qualified as estimated J and nondetects were qualified UJ.

4. The soils method blank analyzed on September 10, 1990, revealed two unknown peaks on library searches at retention times of 28.79 and 33.11 minutes. The same two peaks were seen in sample numbers 23, 24 and 25. These tentatively identified compounds (TICs) were crossed off Form 1F. All other TICs were qualified as estimated J.

Pesticides

1. The percent relative standard deviation (%RSD) for 4,4'-DDT (14.5%) exceeded the EPA criteria of 10%. This affected samples analyzed on September 26 and 27, 1990. For samples analyzed on October 3 and 4, 1990, the %RSD for 4,4'-DDT (11.7%) also exceeded EPA criteria. As a result, all associated positive results were qualified as estimated J.

III. NOTES

Semivolatiles

1. Several compounds had values below the Contract Required Quantitation Limit (CRQL) and, therefore, were qualified as estimated J.

2. All soil samples analyzed for semivolatiles went through GPC cleanup and had double the normal detection limit.

Pesticides

1. All soil holding times for pesticide extraction were exceeded. However, the holding times for soils are currently under investigation, and no action was taken due to the fact that pesticides and PCBs are not expected to degrade significantly.

2. Sample CBH32 was the aqueous sample used for matrix spike/matrix spike duplicate analysis (MS/MDS) while CBH23 was chosen as the soil MS/MSD sample. For CBH32, the percent recoveries for endrin (131% MS and 130% MSD) were outside the advisory limit of 56 to 121 percent. For CBH23, the percent recoveries for both endrin (184% MS and 182% MSD) and 4,4'-DDT (152% MS and 148% MSD) were outside advisory limits. No action was taken.

3. Several compounds had values below the Contract Required Quantitation Limit

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(CRQL) and, therefore, were qualified as estimated J.

This validation was performed using the Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses (February 1988) and the *Region III Modifications (June 1988)*.

ATTACHMENTS

Appendix A	Glossary of Data Qualifier Codes
Appendix B	Data Summary Forms
Appendix C	Results as Reported by Laboratory (Form I)
Appendix D	Reviewed and Corrected Tentatively Identified Compounds
Appendix E	DPO Report
Appendix F	Support Documentation

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APPENDIX A

Glossary of Data Qualifier Codes

GLOSSARY OF DATA QUALIFIER CODES (ORGANIC)

CODES RELATING TO IDENTIFICATION
(confidence concerning presence or absence of compounds):

U = Not detected. The associated number indicates approximate sample concentration necessary to be detected.

(NO CODE) = Confirmed identification.

B = Not detected substantially above the level reported in laboratory or field blanks.

R = Unreliable result. Analyte may or may not be present in the sample. Supporting data necessary to confirm result.

N = Tentative identification. Consider present. Special methods may be needed to confirm its presence or absence in future sampling efforts.

CODES RELATED TO QUANTITATION
(can be used for both positive results and sample quantitation limits):

J = Analyte present. Reported value may not be accurate or precise.

K = Analyte present. Reported value may be biased high. Actual value is expected lower.

L = Analyte present. Reported value may be biased low. Actual value is expected to be higher.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

UL = Not detected, quantitation limit is probably higher.

OTHER CODES

Q = No analytical result.

APPENDIX B

Data Summary Forms

DATA SUMMARY FORM: V O L A T I L E S 1

Site Name: Raymark

SOIL SAMPLES (ug/Kg)

Case #: 14797 Sampling Date(s): 8-28-90

D/T Analysis 9-6-90

To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CBH23		CBH24		CBH25															
	Dilution Factor	1		1		1															
	% Moisture	23		21		16															
	Location	SED-1		SED-3		SED-2															
CRQL	COMPOUND																				
10	Chloromethane																				
10	Bromomethane																				
10	Vinyl Chloride																				
10	Chloroethane																				
5	Methylene Chloride																				
10	Acetone	11	B	52	B	29	B														
5	Carbon Disulfide																				
5	1,1-Dichloroethene																				
5	1,1-Dichloroethane																				
5	Total-1,2-Dichloroethene																				
5	Chloroform																				
5	1,2-Dichloroethane																				
10	2 Butanone		UJ		UJ		UJ														
5	1,1,1-Trichloroethane																				
5	Carbon Tetrachloride																				
10	Vinyl Acetate																				
5	Bromodichloromethane																				

CRDL = Contract Required Detection Limit

SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

AR300528

DATA SUMMARY FORM: V O L A T I L E S 2

Site Name: Raymark

SOIL SAMPLES (ug/Kg)

Case #: 14797 Sampling Date(s): 8-28-90

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CBM23		CBM24		CBM25	
	Dilution Factor	1		1		1	
	% Moisture	23		21		16	
	Location	SED-1		SED 3		SED 2	
CRQL	COMPOUND						
5	1,2-Dichloropropane						
5	Cis-1,3-Dichloropropene						
5	Trichloroethene	3	J				
5	Dibromochloromethane						
5	1,1,2-Trichloroethane						
5	Benzene						
5	Trans-1,3-Dichloropropene						
5	Bromoform						
10	4-Methyl-2-pentanone						
10	2-Hexanone		UJ		UJ		UJ
5	Tetrachloroethene						
5	1,1,2,2-Tetrachloroethane						
5	Toluene						
5	Chlorobenzene						
5	Ethylbenzene						
5	Styrene						
5	Total Xylenes						

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

AR300529

DATA SUMMARY FORM: VOLATILES 1

Site Name: Raymark

Case #: 14797 Sampling Date(s): 8-28-90

D/T Analysis - 9-10-90

WATER SAMPLES (ug/L)

To calculate sample quantitation limit: (CRQL * Dilution Factor)

CRQL	COMPOUND																				
	Sample No.	CBH 26		CBH 27																	
	Dilution Factor	1		1																	
	Location	SED-TB1 Trip Blank		SED-EB 1 Equipment Blank																	
10	Chloromethane		UJ		UJ																
10	Bromomethane																				
10	*Vinyl Chloride																				
10	Chloroethane																				
5	*Methylene Chloride																				
10	Acetone		UJ		UJ																
5	Carbon Disulfide																				
5	*1,1-Dichloroethene																				
5	1,1-Dichloroethane																				
5	*Total-1,2-Dichloroethene																				
5	Chloroform																				
5	*1,2-Dichloroethane		UJ		UJ																
10	*2-Butanone																				
5	*1,1,1-Trichloroethane		UJ		UJ																
5	*Carbon Tetrachloride		UJ		UJ																
10	Vinyl Acetate																				
5	Bromodichloromethane		UJ		UJ																

CRDL = Contract Required Detection Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

AR300530

DATA SUMMARY FORM: V O L A T I L E S 2

Site Name: Raymark

Case #: 14797 Sampling Date(s): 8-28-90

D/T Analysis 9-10-90

WATER SAMPLES (ug/L)

To calculate sample quantitation limit: (CRQL * Dilution Factor)

	Sample No.	CBH26		CBH27															
	Dilution Factor																		
	Location	SED-TB1		SED-EB1															
CRQL	COMPOUND																		
5	*1,2-Dichloropropane																		
5	Cis-1,3-Dichloropropene																		
5	Trichloroethene																		
5	Dibromochloromethane		UJ		UJ														
5	1,1,2-Trichloroethane																		
5	*Benzene																		
5	Trans-1,3-Dichloropropene																		
5	Bromoform		UJ		UJ														
10	4-Methyl-2-pentanone																		
10	2-Hexanone		UJ		UJ														
5	*Tetrachloroethene																		
5	1,1,2,2-Tetrachloroethane																		
5	*Toluene																		
5	*Chlorobenzene																		
5	*Ethylbenzene																		
5	*Styrene																		
5	*Total Xylenes																		

CRDL = Contract Required Detection Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

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AR300531

DATA SUMMARY FORM: B N A S 1

Site Name: RAYMARK

Case #: 14797 Sampling Date(s): 8/28/90

SOIL SAMPLES (ug/Kg)

To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CBH23		CBH24		CBH25													
	Dilution Factor	2*		2*		2*													
	% Moisture	23		21		16													
	Location	SED-1		SED-3		SED-2													
CRQL	COMPOUND																		
330	Phenol		UJ		UJ		UJ												
330	bis(2-Chloroethyl)ether																		
330	2-Chlorophenol																		
330	1,3-Dichlorobenzene																		
330	1,4-Dichlorobenzene																		
330	Benzyl Alcohol																		
330	1,2-Dichlorobenzene																		
330	2-Methylphenol																		
330	bis(2-Chloroisopropyl)ether																		
330	4-Methylphenol																		
330	N-Nitroso-di-n-propylamine																		
330	Hexachloroethane																		
330	Nitrobenzene																		
330	Isophorone																		
330	2-Nitrophenol																		
330	2,4-Dimethylphenol																		
1600	Benzoic Acid																		
330	bis(2-Chloroethoxy)methane																		
330	2,4-Dichlorophenol																		
330	1,2,4-Trichlorobenzene																		
330	Naphthalene																		
330	4-Chloroaniline																		

CRQL = Contract Required Quantitation Limit

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* Higher detection limit due to GPC cleanup.

DATA SUMMARY FORM: B N A S 2

Site Name: RAYMARK

SOIL SAMPLES (ug/Kg)

Case #: 14797 Sampling Date(s): 8/28/90

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CBH23		CBH24		CBH25	
	Dilution Factor	2.*		2.*		2.*	
	% Moisture	23		21		16	
	Location	SED-1		SED-3		SED-2	
CRQL	COMPOUND						
330	Hexachlorobutadiene		UJ		UJ		UJ
330	4-Chloro-3-methylphenol						
330	2-Methylnaphthalene						
330	Hexachlorocyclopentadiene						
330	2,4,6-Trichlorophenol						
1600	2,4,5-Trichlorophenol						
330	2-Chloronaphthalene						
1600	2-Nitroaniline						
330	Dimethylphthalate						
330	Acenaphthylene						
330	2,6-Dinitrotoluene						
1600	3-Nitroaniline						
330	Acenaphthene			140	J		
1600	2,4-Dinitrophenol				UJ		
1600	4-Nitrophenol				UJ		
330	Dibenzofuran			110	J		
330	2,4-Dinitrotoluene				UJ		
330	Diethylphthalate				UJ		
330	4-Chlorophenyl-phenylether				UJ		
330	Fluorene			240	J	90	J
1600	4-Nitroaniline				UJ		UJ
1600	4,6-Dinitro-2-methylphenol				UJ		UJ

CRQL = Contract Required Quantitation Limit

SEE NARRATIVE FOR CODE DEFINITIONS

* Higher detection limit due to GPC cleanup.

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DATA SUMMARY FORM: B N A S 3

Site Name: RAYMARK

SOIL SAMPLES (ug/Kg)

Case #: 14797 Sampling Date(s): 8/28/90

To calculate sample quantitation limit: (CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CBH23		CBH24		CBH25	
	Dilution Factor	2*		2*		2*	
	% Moisture	23		21		16	
	Location	SED-1		SED-3		SED-2	
CRQL	COMPOUND						
330	N-Nitrosodiphenylamine		UJ		UJ		UJ
330	4-Bromophenyl-phenylether		↓		↓		↓
330	Hexachlorobenzene		↓		↓		↓
1600	Pentachlorophenol		↓		↓		↓
330	Phenanthrene	800	J	2800	J	1300	J
330	Anthracene	120	J	490	J	230	J
330	Di-n-butylphthalate		UJ		UJ		UJ
330	Fluoranthene	1300	J	5400	J	2700	J
330	Pyrene	1100	J	4600	J	2200	J
330	Butylbenzylphthalate		UJ		UJ	86	J
1600	3,3-Dichlorobenzidine		UJ		UJ		UJ
330	Benzo(a)anthracene	500	J	1700	J	1000	J
330	Chrysene	570	J	1800	J	960	J
330	bis(2-Ethylhexyl)phthalate		UJ	120	J	420	J
330	Di-n-octylphthalate		UJ		UJ		UJ
330	Benzo(b)fluoranthene	480	J	1600	J	840	J
330	Benzo(k)fluoranthene		UJ	1200	↓	710	↓
330	Benzo(a)pyrene	550	J	1400	↓	800	↓
330	Indeno(1,2,3-cd)pyrene		UJ	1000	↓	790	↓
330	Dibenz(a,h)anthracene		↓	86	↓		UJ
330	Benzo(g,h,i)perylene		↓	840	↓	720	J

CRQL = Contract Required Quantitation Limit

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* Higher detection limit due to GPC cleanup.

DATA SUMMARY FORM: B N A S 1

Site Name: Raymark

WATER SAMPLES (ug/L)

Case #: 14797 Sampling Date(s): 8-30-90 for 32,33,34
8-28-90 for 28,29,30

D/T Analysis

To calculate sample quantitation limit: (CRQL * Dilution Factor)

CRQL	COMPOUND	CBH 32	CBH33	CBH 34	CBH 28	CBH 29	CBH 30	CBH 27		
	Dilution Factor	1	1	1	1	1	1	1		
	Location	GW PFIS	GWPFISD Dup	GW EB-2 Equipment Blank	SW-1	SW 2	SW 3	SED EB1 Equipment Blank for sediments		
10	Phenol									
10	bis(2-Chloroethyl)ether									
10	2-Chlorophenol									
10	*1,3-Dichlorobenzene									
10	*1,4-Dichlorobenzene									
10	Benzyl Alcohol									
10	1,2-Dichlorobenzene									
10	2-Methylphenol									
10	bis(2-Chloroisopropyl)ether									
10	4-Methylphenol									
10	N-Nitroso-di-n propylamine									
10	Hexachloroethane									
10	Nitrobenzene									
10	Isophorone									
10	2-Nitrophenol									
10	2,4-Dimethylphenol									
50	Benzoic Acid									
10	bis(2-Chloroethoxy)methane									
10	2,4-Dichlorophenol									
10	1,2,4-Trichlorobenzene									
10	Naphthalene									
10	4-Chlordamine									

CRDL = Contract Required Detection Limit

*Action Level Exists

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00535

DATA SUMMARY FORM: B N A S 2

Site Name: Raymark

WATER SAMPLES
(ug/L)

Case #: 14797 Sampling Date(s): 8-30-90
8-28-90

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

	Sample No.	CBH 32		CBH 33		CBH 34		CBH 28		CBH 29		CBH 30		CBH 27					
	Dilution Factor	1		1		1		1		1		1		1					
	Location	GW-PF1S		GW-PF1S		GW-EB2		SW-1		SW-2		SW 3		SED-EB1					
CRQL	COMPOUND																		
10	Hexachlorobutadiene																		
10	4-Chloro-3-methylphenol																		
10	2-Methylnaphthalene																		
10	Hexachlorocyclopentadiene																		
10	2,4,6-Trichlorophenol																		
50	2,4,5-Trichlorophenol																		
10	2-Chloronaphthalene																		
50	2-Nitroaniline																		
10	Dimethylphthalate																		
10	Acenaphthylene																		
10	2,6-Dinitrotoluene																		
50	3-Nitroaniline				UJ		UJ												
10	Acenaphthene																		
50	2,4-Dinitrophenol		UJ						UJ		UJ		UJ		UJ				
50	4-Nitrophenol				UJ		UJ												
10	Dibenzofuran																		
10	2,4-Dinitrotoluene																		
10	Diethylphthalate																		
10	4-Chlorophenyl phenylether																		
10	Fluorene																		
50	4-Nitroaniline		UJ		UJ		UJ		UJ		UJ		UJ		UJ				
50	4,6-Dinitro-2-methylphenol		UJ						UJ		UJ		UJ		UJ				

CRDL = Contract Required Detection Limit

*Action Level Exists

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DATA SUMMARY FORM: B N A S 3

WATER SAMPLES
(ug/L)

Site Name: Raymark

Case #: 14797 Sampling Date(s): 8-30-90
8-28-90

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

	Sample No.	CBH 32		CBH-33		CBH-34		CBH 28		CBH 29		CBH 30		CBH 27					
	Dilution Factor	1		1		1		1		1		1		1					
	Location	GW-PF1S		GW-PF1SD DUP		GW-EB2		SW-1		SW-2		SW-3		SED-EB1 Equipment Blank					
CRDL	COMPOUND																		
10	N-Nitrosodiphenylamine																		
10	4-Bromophenyl-phenylether																		
10	*Hexachlorobenzene																		
50	*Pentachlorophenol																		
10	Phenanthrene																		
10	Anthracene																		
10	Di-n-butylphthalate																		
10	Fluoranthene																		
10	Pyrene																		
10	Butylbenzylphthalate																		
20	3,3-Dichlorobenzidine		UJ		UJ		UJ		UJ		UJ		UJ		UJ				
10	Benzo(a)anthracene																		
10	Chrysene																		
10	bis(2-Ethylhexyl)phthalate																		
10	Di-n-octylphthalate																		
10	Benzo(b)fluoranthene																		
10	Benzo(k)fluoranthene																		
10	Benzo(a)pyrene																		
10	Indeno(1,2,3-cd)pyrene																		
10	Dibenz(a,h)anthracene																		
10	Benzo(g,h,i)perylene																		

CRDL = Contract Required Detection Limit *Action Level Exists SEE NARRATIVE FOR CODE DEFINITIONS

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DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Raymark

SOIL SAMPLES (ug/Kg)

Case #: 14797 Sampling Date(s): 8-28-90

To calculate sample quantitation limit:
(CRQL * Dilution Factor) / ((100 - % moisture)/100)

	Sample No.	CBH23		CBH24		CBH25													
	Dilution Factor	1.00		1.00		1.00													
	% Moisture																		
	Location																		
CRQL	COMPOUND																		
8	alpha-BHC																		
8	beta-BHC																		
8	delta-BHC																		
8	Gamma-BHC (Lindane)																		
8	Heptachlor																		
8	Aldrin																		
8	Heptachlor Epoxide																		
8	Endosulfan I																		
16	Dieldrin					22	J												
16	4,4'-DDE																		
16	Endrin																		
16	Endosulfan II																		
16	4,4'-DDD																		
16	Endosulfan Sulfate																		
16	4,4'-DDT																		
80	Methoxychlor																		
16	Endrin ketone																		
80	Alpha-Chlordane	3.5	J	4.2	J	11	J												
80	Gamma-Chlordane					11	J												
160	Toxaphene																		
80	Aroclor-1016																		
80	Aroclor-1221																		
80	Aroclor-1232																		
80	Aroclor-1242																		
80	Aroclor-1248																		
160	Aroclor-1254																		
160	Aroclor-1260																		

CRQL = Contract Required Quantitation Limit

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DATA SUMMARY FORM: PESTICIDES AND PCBS

Site Name: Raymark

Case #: 14797 Sampling Date(s): 8-28-90 / 8-30-90

WATER SAMPLES (ug/L)

To calculate sample quantitation limit: (CRQL * Dilution Factor)

	Sample No.	CBH27		CBH28		CBH29		CBH30		CBH32		CBH33		CBH34					
	Dilution Factor	1.00		1.00		1.00		1.00		1.00		1.00		1.00					
	Location																		
CRQL	COMPOUND																		
0.05	alpha-BHC																		
0.05	beta-BHC																		
0.05	delta-BHC																		
0.05	*Gamma-BHC (Lindane)																		
0.05	*Heptachlor																		
0.05	Aldrin																		
0.05	Heptachlor Epoxide																		
0.05	Endosulfan I																		
0.10	Dieldrin					0.035	J												
0.10	4,4'-DDE																		
0.10	*Endrin																		
0.10	Endosulfan II																		
0.10	4,4'-DDD																		
0.10	Endosulfan Sulfate																		
0.10	4,4'-DDT																		
0.5	*Methoxychlor																		
0.10	Endrin ketone																		
0.5	*Alpha-Chlordane																		
0.5	*Gamma-Chlordane																		
1.0	*Toxaphene																		
0.5	*Aroclor-1016																		
0.5	*Aroclor-1221																		
0.5	*Aroclor-1232																		
0.5	*Aroclor-1242																		
0.5	*Aroclor-1248																		
1.0	*Aroclor-1254																		
1.0	*Aroclor-1260																		

CRDL = Contract Required Detection Limit

*Action Level Exists

SEE NARRATIVE FOR CODE DEFINITIONS

revised 12/88

AR300539

APPENDIX C

Results as Reported by the Laboratory (Form I)

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH23

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55902

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A4673

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 23 Date Analyzed: 09/06/90

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	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	11	BJ
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	3	J
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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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH24

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55903

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A4674

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 21 Date Analyzed: 09/06/90

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	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	52	B
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

AR300542

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH25

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55904

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A4675

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 16 Date Analyzed: 09/06/90

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	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	6	U
67-64-1	Acetone	29	B
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

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH26

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55905

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A4766

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. ____ Date Analyzed: 09/10/90

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	Xylene (total)	5	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH27

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55906

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A4767

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. ____ Date Analyzed: 09/10/90

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	Xylene (total)	5	U

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH23

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55902

Sample wt/vol: 30.1 (g/mL) G Lab File ID: BN1003B

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 23 dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: 7.7 Dilution Factor: ~~0.50~~ 1.0 RGB 10/5/90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	850	U
111-44-4	bis(2-Chloroethyl)Ether	850	U
95-57-8	2-Chlorophenol	850	U
541-73-1	1,3-Dichlorobenzene	850	U
106-46-7	1,4-Dichlorobenzene	850	U
100-51-6	Benzyl Alcohol	850	U
95-50-1	1,2-Dichlorobenzene	850	U
95-48-7	2-Methylphenol	850	U
108-60-1	bis(2-Chloroisopropyl)Ether	850	U
106-44-5	4-Methylphenol	850	U
621-64-7	N-Nitroso-Di-n-Propylamine	850	U
67-72-1	Hexachloroethane	850	U
98-95-3	Nitrobenzene	850	U
78-59-1	Isophorone	850	U
88-75-5	2-Nitrophenol	850	U
105-67-9	2,4-Dimethylphenol	850	U
65-85-0	Benzoic Acid	4100	U
111-91-1	bis(2-Chloroethoxy)Methane	850	U
120-83-2	2,4-Dichlorophenol	850	U
120-82-1	1,2,4-Trichlorobenzene	850	U
91-20-3	Naphthalene	850	U
106-47-8	4-Chloroaniline	850	U
87-68-3	Hexachlorobutadiene	850	U
59-50-7	4-Chloro-3-Methylphenol	850	U
91-57-6	2-Methylnaphthalene	850	U
77-47-4	Hexachlorocyclopentadiene	850	U
88-06-2	2,4,6-Trichlorophenol	850	U
95-95-4	2,4,5-Trichlorophenol	4100	U
91-58-7	2-Chloronaphthalene	850	U
88-74-4	2-Nitroaniline	4100	U
131-11-3	Dimethyl Phthalate	850	U
208-96-8	Acenaphthylene	850	U
606-20-2	2,6-Dinitrotoluene	850	U

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH23

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55902

Sample wt/vol: 30.1 (g/mL) G Lab File ID: BN1003B

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 23 dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: 7.7 Dilution Factor: ~~0.50~~ 1.0 RGB 10/5/90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4100	U
83-32-9	Acenaphthene	850	U
51-28-5	2,4-Dinitrophenol	4100	U
100-02-7	4-Nitrophenol	4100	U
132-64-9	Dibenzofuran	850	U
121-14-2	2,4-Dinitrotoluene	850	U
84-66-2	Diethylphthalate	850	U
7005-72-3	4-Chlorophenyl-phenylether	850	U
86-73-7	Fluorene	850	U
100-01-6	4-Nitroaniline	4100	U
534-52-1	4,6-Dinitro-2-Methylphenol	4100	U
86-30-6	N-Nitrosodiphenylamine (1)	850	U
101-55-3	4-Bromophenyl-phenylether	850	U
118-74-1	Hexachlorobenzene	850	U
87-86-5	Pentachlorophenol	4100	U
85-01-8	Phenanthrene	800	J
120-12-7	Anthracene	120	J
84-74-2	Di-n-Butylphthalate	850	U
206-44-0	Fluoranthene	1300	
129-00-0	Pyrene	1100	
85-68-7	Butylbenzylphthalate	850	U
91-94-1	3,3'-Dichlorobenzidine	1700	U
56-55-3	Benzo(a)Anthracene	500	J
218-01-9	Chrysene	570	J
117-81-7	bis(2-Ethylhexyl)phthalate	850	U
117-84-0	Di-n-Octyl Phthalate	850	U
205-99-2	Benzo(b)Fluoranthene	480	J
207-08-9	Benzo(k)Fluoranthene	850	U
50-32-8	Benzo(a)Pyrene	350	J
193-39-5	Indeno(1,2,3-cd)Pyrene	850	U
53-70-3	Dibenz(a,h)Anthracene	850	U
191-24-2	Benzo(g,h,i)Perylene	850	U

(1) - Cannot be separated from Diphenylamine

AR300547

0169

5 1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH24

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH2I

Matrix: (soil/water) SOIL Lab Sample ID: 55903

Sample wt/vol: 30.7 (g/mL) G Lab File ID: BN1003E

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 21 dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: 7.6 Dilution Factor: ~~0.50~~ 1.0 RGB 10/5/90

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

CAS NO.	COMPOUND	Q	
108-95-2	Phenol	820	U
111-44-4	bis(2-Chloroethyl)Ether	820	U
95-57-8	2-Chlorophenol	820	U
541-73-1	1,3-Dichlorobenzene	820	U
106-46-7	1,4-Dichlorobenzene	820	U
100-51-6	Benzyl Alcohol	820	U
95-50-1	1,2-Dichlorobenzene	820	U
95-48-7	2-Methylphenol	820	U
108-60-1	bis(2-Chloroisopropyl)Ether	820	U
106-44-5	4-Methylphenol	820	U
621-64-7	N-Nitroso-Di-n-Propylamine	820	U
67-72-1	Hexachloroethane	820	U
98-95-3	Nitrobenzene	820	U
78-59-1	Isophorone	820	U
88-75-5	2-Nitrophenol	820	U
105-67-9	2,4-Dimethylphenol	820	U
65-85-0	Benzoic Acid	4000	U
111-91-1	bis(2-Chloroethoxy)Methane	820	U
120-83-2	2,4-Dichlorophenol	820	U
120-82-1	1,2,4-Trichlorobenzene	820	U
91-20-3	Naphthalene	820	U
106-47-8	4-Chloroaniline	820	U
87-68-3	Hexachlorobutadiene	820	U
59-50-7	4-Chloro-3-Methylphenol	820	U
91-57-6	2-Methylnaphthalene	820	U
77-47-4	Hexachlorocyclopentadiene	820	U
88-06-2	2,4,6-Trichlorophenol	820	U
95-95-4	2,4,5-Trichlorophenol	4000	U
91-58-7	2-Chloronaphthalene	820	U
88-74-4	2-Nitroaniline	4000	U
131-11-3	Dimethyl Phthalate	820	U
208-96-8	Acenaphthylene	820	U
606-20-2	2,6-Dinitrotoluene	82[illegible]	

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH24

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55903

Sample wt/vol: 30.7 (g/mL) G Lab File ID: BN1003E

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 21 dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: 7.6 Dilution Factor: ~~0.50~~ 1.0 60 10/5/90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	4000	U
83-32-9	Acenaphthene	140	J
51-28-5	2,4-Dinitrophenol	4000	U
100-02-7	4-Nitrophenol	4000	U
132-64-9	Dibenzofuran	110	J
121-14-2	2,4-Dinitrotoluene	820	U
84-66-2	Diethylphthalate	820	U
7005-72-3	4-Chlorophenyl-phenylether	820	U
86-73-7	Fluorene	240	J
100-01-6	4-Nitroaniline	4000	U
534-52-1	4,6-Dinitro-2-Methylphenol	4000	U
86-30-6	N-Nitrosodiphenylamine (1)	820	U
101-55-3	4-Bromophenyl-phenylether	820	U
118-74-1	Hexachlorobenzene	820	U
87-86-5	Pentachlorophenol	4000	U
85-01-8	Phenanthrene	2800	
120-12-7	Anthracene	490	J
84-74-2	Di-n-Butylphthalate	820	U
206-44-0	Fluoranthene	5400	
129-00-0	Pyrene	4600	
85-68-7	Butylbenzylphthalate	820	U
91-94-1	3,3'-Dichlorobenzidine	1600	U
56-55-3	Benzo(a)Anthracene	1700	
218-01-9	Chrysene	1800	
117-81-7	bis(2-Ethylhexyl)phthalate	120	J
117-84-0	Di-n-Octyl Phthalate	820	U
205-99-2	Benzo(b)Fluoranthene	1600	
207-08-9	Benzo(k)Fluoranthene	1200	
50-32-8	Benzo(a)Pyrene	1400	
193-39-5	Indeno(1,2,3-cd)Pyrene	1000	
53-70-3	Dibenz(a,h)Anthracene	86	J
191-24-2	Benzo(g,h,i)Perylene	840	

(1) - Cannot be separated from Diphenylamine

AR300549

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH25

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55904

Sample wt/vol: 30.1 (g/mL) G Lab File ID: BN1003F

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 16 dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: ~~1.50~~ 1.0 RGG 10/5/90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	780	U
111-44-4	bis(2-Chloroethyl)Ether	780	U
95-57-8	2-Chlorophenol	780	U
541-73-1	1,3-Dichlorobenzene	780	U
106-46-7	1,4-Dichlorobenzene	780	U
100-51-6	Benzyl Alcohol	780	U
95-50-1	1,2-Dichlorobenzene	780	U
95-48-7	2-Methylphenol	780	U
108-60-1	bis(2-Chloroisopropyl)Ether	780	U
106-44-5	4-Methylphenol	780	U
621-64-7	N-Nitroso-Di-n-Propylamine	780	U
67-72-1	Hexachloroethane	780	U
98-95-3	Nitrobenzene	780	U
78-59-1	Isophorone	780	U
88-75-5	2-Nitrophenol	780	U
105-67-9	2,4-Dimethylphenol	780	U
65-85-0	Benzoic Acid	7800	U
111-91-1	bis(2-Chloroethoxy)Methane	780	U
120-83-2	2,4-Dichlorophenol	780	U
120-82-1	1,2,4-Trichlorobenzene	780	U
91-20-3	Naphthalene	780	U
106-47-8	4-Chloroaniline	780	U
87-68-3	Hexachlorobutadiene	780	U
59-50-7	4-Chloro-3-Methylphenol	780	U
91-57-6	2-Methylnaphthalene	780	U
77-47-4	Hexachlorocyclopentadiene	780	U
88-06-2	2,4,6-Trichlorophenol	780	U
95-95-4	2,4,5-Trichlorophenol	3800	U
91-58-7	2-Chloronaphthalene	780	U
88-74-4	2-Nitroaniline	3800	U
131-11-3	Dimethyl Phthalate	780	U
208-96-8	Acenaphthylene	780	U
606-20-2	2,6-Dinitrotoluene	780	U

AR300550

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH25

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55904

Sample wt/vol: 30.1 (g/mL) G Lab File ID: BN1003F

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 16 dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: ~~0.50~~ 1.0 RGB 10/5/90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3800	U
83-32-9	Acenaphthene	780	U
51-28-5	2,4-Dinitrophenol	3800	U
100-02-7	4-Nitrophenol	3800	U
132-64-9	Dibenzofuran	780	U
121-14-2	2,4-Dinitrotoluene	780	U
84-66-2	Diethylphthalate	780	U
7005-72-3	4-Chlorophenyl-phenylether	780	U
86-73-7	Fluorene	90	J
100-01-6	4-Nitroaniline	3800	U
534-52-1	4,6-Dinitro-2-Methylphenol	3800	U
86-30-6	N-Nitrosodiphenylamine (1)	780	U
101-55-3	4-Bromophenyl-phenylether	780	U
118-74-1	Hexachlorobenzene	780	U
87-86-5	Pentachlorophenol	3800	U
85-01-8	Phenanthrene	1300	
120-12-7	Anthracene	230	J
84-74-2	Di-n-Butylphthalate	780	U
206-44-0	Fluoranthene	2700	
129-00-0	Pyrene	2200	
85-68-7	Butylbenzylphthalate	86	J
91-94-1	3,3'-Dichlorobenzidine	1600	U
56-55-3	Benzo(a)Anthracene	1000	
218-01-9	Chrysene	960	
117-81-7	bis(2-Ethylhexyl)phthalate	420	J
117-84-0	Di-n-Octyl Phthalate	780	U
205-99-2	Benzo(b)Fluoranthene	840	
207-08-9	Benzo(k)Fluoranthene	710	J
50-32-8	Benzo(a)Pyrene	800	
193-39-5	Indeno(1,2,3-cd)Pyrene	790	
53-70-3	Dibenz(a,h)Anthracene	780	U
191-24-2	Benzo(g,h,i)Perylene	720	J

(1) - Cannot be separated from Diphenylamine

AR300551

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH27

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55906

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001C

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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
108-60-1	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

AR300552

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH27

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55906

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001C

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300553

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH28

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55907

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001D

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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
108-60-1	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

AR300554

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH28

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55907

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001D

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300555

C329

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH29

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55908

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001E

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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
108-60-1	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

AR300556

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH29

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55908

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001E

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300557

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH30

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55909

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001F

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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
108-60-1	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

AR300558

AR301558

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH30

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55909

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001F

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300559

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH32

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55910

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001G

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. dec. Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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
108-60-1	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

AR300560

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH32

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55910

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001G

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. dec. Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300561

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH33

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55911

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1002C

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. dec. Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/02/90

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
108-60-1	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
79-59-1	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

AR300562

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH33

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 5E911

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1002C

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. dec. Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/02/90

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	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300563

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH34

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55912

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1002D

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. dec. Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/02/90

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
108-60-1	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

AR300564

AR300

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH34

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55912

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1002D

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. dec. Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/02/90

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	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

AR300565

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH23

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55902

Sample wt/vol: 30.6 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 24 dec. __ Date Extracted: 10/02/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y 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	21	U
319-85-7	beta-BHC	21	U
319-86-8	delta-BHC	21	U
58-89-9	gamma-BHC (Lindane)	21	U
76-44-8	Heptachlor	21	U
309-00-2	Aldrin	21	U
1024-57-3	Heptachlor epoxide	21	U
959-98-8	Endosulfan I	21	U
60-57-1	Dieldrin	41	U
72-55-9	4,4'-DDE	41	U
72-20-8	Endrin	41	U
33213-65-9	Endosulfan II	41	U
72-54-8	4,4'-DDD	41	U
1031-07-8	Endosulfan sulfate	41	U
50-29-3	4,4'-DDT	41	U
72-43-5	Methoxychlor	210	U
53494-70-5	Endrin ketone	41	U
5103-71-9	alpha-Chlordane	3.5	J
5103-74-2	gamma-Chlordane	210	U
8001-35-2	Toxaphene	410	U
12674-11-2	Aroclor-1016	210	U
11104-28-2	Aroclor-1221	210	U
11141-16-5	Aroclor-1232	210	U
53469-21-9	Aroclor-1242	210	U
12672-29-6	Aroclor-1248	210	U
11097-69-1	Aroclor-1254	410	U
11096-82-5	Aroclor-1260	410	U

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH24

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55903

Sample wt/vol: 30.7 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 21 dec. __ Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/26/90

GPC Cleanup: (Y/N) Y 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	20	U
319-85-7	beta-BHC	20	U
319-86-8	delta-BHC	20	U
58-89-9	gamma-BHC (Lindane)	20	U
76-44-8	Heptachlor	20	U
309-00-2	Aldrin	20	U
1024-57-3	Heptachlor epoxide	20	U
959-98-8	Endosulfan I	20	U
60-57-1	Dieldrin	39	U
72-55-9	4,4'-DDE	39	U
72-20-8	Endrin	39	U
33213-65-9	Endosulfan II	39	U
72-54-8	4,4'-DDD	39	U
1031-07-8	Endosulfan sulfate	39	U
50-29-3	4,4'-DDT	39	U
72-43-5	Methoxychlor	200	U
53494-70-5	Endrin ketone	39	U
5103-71-9	alpha-Chlordane	4.2	J
5103-74-2	gamma-Chlordane	200	U
8001-35-2	Toxaphene	390	U
12674-11-2	Aroclor-1016	200	U
11104-28-2	Aroclor-1221	200	U
11141-16-5	Aroclor-1232	200	U
53469-21-9	Aroclor-1242	200	U
12672-29-6	Aroclor-1248	200	U
11097-69-1	Aroclor-1254	390	U
11096-82-5	Aroclor-1260	390	U

AR300567

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH25

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55904

Sample wt/vol: 30.1 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 17 dec. __ Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 09/26/90

GPC Cleanup: (Y/N) Y 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	19	U
319-85-7	beta-BHC	19	U
319-86-8	delta-BHC	19	U
58-89-9	gamma-BHC (Lindane)	19	U
76-44-8	Heptachlor	19	U
309-00-2	Aldrin	19	U
1024-57-3	Heptachlor epoxide	19	U
959-98-8	Endosulfan I	19	U
60-57-1	Dieldrin	22	J
72-55-9	4,4'-DDE	38	U
72-20-8	Endrin	38	U
33213-65-9	Endosulfan II	38	U
72-54-8	4,4'-DDD	38	U
1031-07-8	Endosulfan sulfate	38	U
50-29-3	4,4'-DDT	38	U
72-43-5	Methoxychlor	190	U
53494-70-5	Endrin ketone	38	U
5103-71-9	alpha-Chlordane	11	J
5103-74-2	gamma-Chlordane	11	J
8001-35-2	Toxaphene	380	U
12674-11-2	Aroclor-1016	190	U
11104-28-2	Aroclor-1221	190	U
11141-16-5	Aroclor-1232	190	U
53469-21-9	Aroclor-1242	190	U
12672-29-6	Aroclor-1248	190	U
11097-69-1	Aroclor-1254	380	U
11096-82-5	Aroclor-1260	380	U

AR300568

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH29

Lab Name: WEYERHAEUSER Contract: 68D90026

Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55908

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

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. __ dec. __ Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/26/90

GPC Cleanup: (Y/N) N pH: 7.0 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	0.035	J
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

AR300569

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH30

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55909

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

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. __ dec. __ Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/26/90

GPC Cleanup: (Y/N) N pH: 7.0 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

AR300570

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH32

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55910

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

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. __ dec. __ Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/26/90

GPC Cleanup: (Y/N) N pH: 7.0 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

AR300571

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH33

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55911

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

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. __ dec. __ Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/26/90

GPC Cleanup: (Y/N) N pH: 7.0 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

AR300572

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH34

Lab Name: WEYERHAEUSER Contract: 68D90026

Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55912

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

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. __ dec. __ Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/26/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		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

AR300573

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH27

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55906

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

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. __ dec. __ Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/26/90

GPC Cleanup: (Y/N) N pH: 7.0 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

AR300574

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CBH28

Lab Name: WEYERHAEUSER Contract: 68D90026

Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55907

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

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. __ dec. __ Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 09/26/90

GPC Cleanup: (Y/N) N pH: 7.0 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

AR300575

APPENDIX D

Reviewed and Corrected Tentatively Identified Compounds

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH23

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55902

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A4673

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 23 Date Analyzed: 09/06/90

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

AR300577

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH24

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55903

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A4674

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 21 Date Analyzed: 09/06/90

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

AR300578

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH25

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55904

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A4675

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 16 Date Analyzed: 09/06/90

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

AR300579

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH26

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55905

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A4766

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. ____ Date Analyzed: 09/10/90

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

AR300580

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH27

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55906

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A4767

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. ____ Date Analyzed: 09/10/90

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

AR300581

B 1F

EPA SAMPLE NO.

CBH23

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55902

Sample wt/vol: 30.1 (g/mL) G Lab File ID: BN1003B

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 23 dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: 7.7 Dilution Factor: ~~1.50~~ 1.0 RGB 10/5/90

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1. 10544-50-0	SULFUR, MOL. (S8)	25.27	140	JX	J
2.	UNKNOWN	26.69	350	JX	J
3. 603-11-2	1,2-BENZENEDICARBOXYLIC ACID	30.79	350	JX	J
4.	~~UNKNOWN~~	~~33.11~~	~~1400~~	~~JX~~	
5.	~~UNKNOWN~~	~~28.77~~	~~6900~~	~~JX~~	

AR300582

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH25

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55904

Sample wt/vol: 30.1 (g/mL) G Lab File ID: BN1003F

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 16 dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: ~~0.50~~ 1.0 EGB 10/5/90

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1. 203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	23.67	1300	JX	J
2.	UNKNOWN	24.92	330	JX	J
3.	UNKNOWN	26.26	590	JX	J
4.	UNKNOWN	26.71	440	JX	J
5. 238-84-6	11H-BENZO[A]FLUORENE	27.36	1200	JX	J
6.	~~UNKNOWN~~	~~28.81~~	~~5800~~	~~JX~~	
7.	~~UNKNOWN~~	~~33.12~~	~~2000~~	~~JX~~	
8. 205-99-2	BENZ[E]ACEPHENANTHRYLENE	34.07	1100	JX	J
9.	UNKNOWN	36.06	590	JX	J

AR300583

3 1F

EPA SAMPLE NO.

CBH24

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: 55903

Sample wt/vol: 30.7 (g/mL) G Lab File ID: BN1003E

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. 21 dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: 7.6 Dilution Factor: ~~0.50~~ 1.0 RLB 10/15/90

Number TICs found: 9

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1. 2531-84-2	PHENANTHRENE, 2-METHYL-	23.44	290	JX	J
2. 203-64-5	4H-CYCLOPENTA[DEF]PHENANTHRE	23.67	570	JX	J
3. 84-65-1	9,10-ANTHRACENEDIONE	24.35	310	JX	J
4.	UNKNOWN	26.26	1500	JX	J
5. 238-84-6	11H-BENZO[A]FLUORENE	27.34	1100	JX	J
6.	UNKNOWN	29.41	550	JX	J
7.	~~UNKNOWN~~	~~33.11~~	~~1800~~	JX	
8. 192-97-2	BENZO[E]PYRENE	34.06	1300	JX	J
9.	~~UNKNOWN~~	~~28.81~~	~~5800~~	~~JX~~	

AR300584

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH27

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55906

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001C

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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

AR300585

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH29

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55907

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001D

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	
1.	603-11-2	1,2-BENZENEDICARBOXYLIC ACID	30.82	10	JX	J
2.	74753-00-7	1,4-HEXADIENE, 3,3,5-TRIMETH	33.62	25	JX	J

AR300586

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH29

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55908

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001E

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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

AR300587 34

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH30

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55909

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001F

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 08/31/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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

AR300588

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH32

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55910

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1001G

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. dec. Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/01/90

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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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH33

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55911

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1002C

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. dec. Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/02/90

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

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

AR300590

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

CBH34

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) WATER Lab Sample ID: 55912

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BN1002D

Level: (low/med) LOW Date Received: 08/31/90

% Moisture: not dec. dec. Date Extracted: 09/04/90

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 10/02/90

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

AR300591

APPENDIX E

DPO Report

DPO: [ ] ACTION [ ] FYI

Region _____

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 14797

LABORATORY Weyerhauser Labs

SDG NO. CBH 23

DATA USER _____

SOW _____

REVIEW COMPLETION DATE _____

NO. OF SAMPLES 10 MATRIX Waters

REVIEWER [ ] ESD [ ] ESAT [X] OTHER, CONTRACT/CONTRACTOR CH2M HILL

	VOA (2 samples)	BNA	PEST	OTHER
1. HOLDING TIMES	O	O	O	
2. GC-MS TUNE/ GC PERFORMANCE	O	O	O	
3. INITIAL CALIBRATIONS	O	X	O	
4. CONTINUING CALIBRATIONS	X	X	O	
5. FIELD BLANKS ("F" = not applicable)	O	O	O	
6. LABORATORY BLANKS	O	X	O	
7. SURROGATES	O	O	O	
8. MATRIX SPIKE/DUPLICATES	O	X	O	
9. REGIONAL QC ("F" = not applicable)	F	F	O	
10. INTERNAL STANDARDS	O	O		
11. COMPOUND IDENTIFICATION	O	O	O	
12. COMPOUND QUANTITATION	O	O	O	
13. SYSTEM PERFORMANCE	X	O	O	
14. OVERALL ASSESSMENT	X	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 = DPO action requested; use in conjunction with one of the above codes.

DPO ACTION ITEMS: _____

AR300593

AREAS OF CONCERN: VTSR was not met for 26,27. However, these samples were analyzed within 14 days & are not flagged.

DPO: [ ] ACTION [ ] FYI

Region 10

ORGANIC REGIONAL DATA ASSESSMENT SUMMARY

CASE NO. 14797 LABORATORY Weyerhaeuser

SDG NO. CBH 23 DATA USER

SOW REVIEW COMPLETION DATE

NO. OF SAMPLES 3 MATRIX Soils

REVIEWER [ ] ESD [ ] ESAT [X] OTHER, CONTRACT/CONTRACTOR CH2M HILL

	VOA	BNA	PEST	OTHER
1. HOLDING TIMES	O	Z	O	
2. GC-MS TUNE/ GC PERFORMANCE	O	O	O	
3. INITIAL CALIBRATIONS	O	X	X	
4. CONTINUING CALIBRATIONS	X	X	O	
5. FIELD BLANKS ('F' = not applicable)	O	F	O	
6. LABORATORY BLANKS	O	O	O	
7. SURROGATES	O	O	O	
8. MATRIX SPIKE/DUPLICATES	O	M	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	X	X	O	
14. OVERALL ASSESSMENT	X	M	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 = DPO action requested; use in conjunction with one of the above codes.

DPO ACTION ITEMS:

AR300594

AREAS OF CONCERN: ~~Soil~~ Sample & MS/MSD were extracted for BNAs outside of holding time

APPENDIX F

Support Documentation

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Instrument ID: VOA1 Calibration date: 09/06/90 Time: 0931

Lab File ID: A4660 Init. Calib. Date(s): 09/05/90 09/05/90

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	0.449	0.494	-10.0	#
Bromomethane		1.162	1.307	-12.5	
Vinyl chloride	*	0.720	0.793	-10.1	*
Chloroethane		0.617	0.643	-4.2	
Methylene chloride		1.190	1.219	-2.4	
Acetone		0.483	0.383	20.7	
Carbon disulfide		2.607	2.875	-10.3	
1,1-Dichloroethene	*	1.112	1.349	-21.3	*
1,1-Dichloroethane	#	2.163	2.328	-7.6	#
1,2-Dichloroethene (total)		1.231	1.367	-11.1	
Chloroform	*	2.739	2.976	-8.7	*
1,2-Dichloroethane		1.819	1.874	-3.0	
2-Butanone		0.704	0.501	28.8	
1,1,1-Trichloroethane		0.755	0.807	-6.9	
Carbon tetrachloride		0.748	0.783	-4.7	
Vinyl acetate		0.568	0.467	17.8	
Bromodichloromethane		0.850	0.823	3.2	
1,2-Dichloropropane	*	0.312	0.288	7.7	*
cis-1,3-Dichloropropene		0.537	0.507	5.6	
Trichloroethene		0.479	0.498	-4.0	
Dibromochloromethane		0.858	0.787	8.3	
1,1,2-Trichloroethane		0.361	0.330	8.6	
Benzene		0.765	0.740	3.3	
trans-1,3-Dichloropropene		0.507	0.470	7.3	
Bromoform	#	0.828	0.728	12.1	#
4-Methyl-2-pentanone		0.493	0.382	22.5	
2-Hexanone		0.403	0.275	31.8	
Tetrachloroethene		0.592	0.651	-10.0	
1,1,2,2-Tetrachloroethane	#	0.903	0.773	14.4	#
Toluene	*	0.668	0.679	-1.6	*
Chlorobenzene	#	0.963	0.951	1.2	#
Ethylbenzene	*	0.418	0.414	1.0	*
Styrene		0.811	0.785	3.2	
Xylene (total)		0.476	0.464	2.5	
d8-toluene		1.115	1.073	3.8	
Bromofluorobenzene		0.872	0.838	3.9	
d4-1,4-dichloroethane		1.632	1.589	2.6	

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7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Instrument ID: VOA1 Calibration date: 09/10/90 Time: 1124

Lab File ID: A4763 Init. Calib. Date(s): 09/07/90 09/07/90

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		$\overline{RRF}$	RRF50	%D	
Chloromethane	#	0.355	0.518	-45.9	#
Bromomethane		1.071	1.134	-5.9	
Vinyl chloride	*	0.592	0.680	-14.9	*
Chloroethane		0.446	0.498	-11.7	
Methylene chloride		1.144	1.018	11.0	
Acetone		0.209	0.294	-40.7	
Carbon disulfide		2.195	1.883	14.2	
1,1-Dichloroethene	*	1.161	1.116	3.9	*
1,1-Dichloroethane	#	2.258	2.262	-0.2	#
1,2-Dichloroethene (total)		1.247	1.147	8.0	
Chloroform	*	3.204	3.804	-18.7	*
1,2-Dichloroethane		2.110	2.812	-33.3	
2-Butanone		0.334	0.400	-19.8	
1,1,1-Trichloroethane		0.900	0.639	29.0	
Carbon tetrachloride		0.887	1.353	-52.5	
Vinyl acetate		0.365	0.399	-9.3	
Bromodichloromethane		0.942	1.194	-26.8	
1,2-Dichloropropane	*	0.316	0.311	1.6	*
cis-1,3-Dichloropropene		0.544	0.578	-6.3	
Trichloroethene		0.507	0.550	-8.5	
Dibromochloromethane		0.848	1.074	-26.7	
1,1,2-Trichloroethane		0.340	0.359	-5.6	
Benzene		0.757	0.699	7.7	
trans-1,3-Dichloropropene		0.490	0.577	-17.8	
Bromoform	#	0.660	0.902	-36.7	#
4-Methyl-2-pentanone		0.263	0.295	-12.2	
2-Hexanone		0.220	0.280	-27.3	
Tetrachloroethene		0.651	0.733	-12.6	
1,1,2,2-Tetrachloroethane	#	0.655	0.579	11.6	#
Toluene	*	0.688	0.621	9.7	*
Chlorobenzene	#	1.020	0.989	3.0	#
Ethylbenzene	*	0.436	0.427	2.1	*
Styrene		0.857	0.796	7.1	
Xylene (total)		0.498	0.476	4.4	
d8-toluene		1.109	0.978	11.8	
Bromofluorobenzene		0.895	0.955	-6.7	
d4-1,4-dichloroethane		1.811	2.264	-25.0	

AR300597

011a

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN Calibration Date(s): 10/01/90 10/01/90

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = BN1001020 RRF50 = BN1001050
RRF80 = BN1001080 RRF120= BN1001120 RRF160= BN1001160

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Phenol *	1.600	1.919	2.123	2.176	2.310	2.026	13.6*
bis(2-Chloroethyl)Ether	1.627	1.921	2.129	2.174	2.514	2.073	15.8
2-Chlorophenol	1.290	1.549	1.630	1.671	1.752	1.578	11.2
1,3-Dichlorobenzene	1.453	1.622	1.602	1.639	1.652	1.594	5.1
1,4-Dichlorobenzene *	1.591	1.713	1.756	1.810	1.840	1.742	5.6*
Benzyl Alcohol	0.627	0.822	0.813	0.853	0.599	0.743	16.1
1,2-Dichlorobenzene	1.420	1.574	1.558	1.598	1.588	1.548	4.7
2-Methylphenol	1.043	1.310	1.413	1.399	1.497	1.332	13.1
bis(2-Chloroisopropyl)Ether	5.379	5.981	5.513	5.692	5.358	5.585	4.6
4-Methylphenol	1.018	1.305	1.259	1.306	1.299	1.237	10.0
N-Nitroso-Di-n-Propylamine #	1.626	2.162	2.027	2.069	2.117	2.000	10.8#
Hexachloroethane	0.576	0.694	0.741	0.860	0.896	0.753	17.2
Nitrobenzene	0.488	0.589	0.636	0.637	0.620	0.594	10.5
Isophorone	0.838	0.889	0.835	0.644	0.611	0.763	16.6
2-Nitrophenol *	0.151	0.177	0.190	0.190	0.195	0.181	9.9*
2,4-Dimethylphenol	0.330	0.388	0.383	0.367	0.356	0.365	6.4
Benzoic Acid		0.166	0.209	0.203	0.213	0.198	10.9
bis(2-Chloroethoxy)Methane	0.547	0.589	0.585	0.563	0.570	0.571	3.0
2,4-Dichlorophenol *	0.276	0.316	0.311	0.303	0.295	0.300	5.2*
1,2,4-Trichlorobenzene	0.331	0.361	0.342	0.337	0.324	0.339	4.1
Naphthalene	1.059	1.161	1.130	1.134	1.133	1.123	3.4
4-Chloroaniline	0.312	0.389	0.383	0.380	0.349	0.363	8.9
Hexachlorobutadiene *	0.183	0.202	0.196	0.201	0.195	0.195	3.9*
4-Chloro-3-Methylphenol *	0.233	0.284	0.290	0.284	0.273	0.273	8.5*
2-Methylnaphthalene	0.562	0.592	0.556	0.521	0.470	0.540	8.6
Hexachlorocyclopentadiene #	0.258	0.310	0.350	0.340	0.361	0.324	12.8#
2,4,6-Trichlorophenol *	0.370	0.418	0.445	0.429	0.442	0.421	7.2*
2,4,5-Trichlorophenol		0.422	0.461	0.408	0.424	0.429	5.3
2-Chloronaphthalene	1.307	1.375	1.413	1.394	1.461	1.390	4.1
2-Nitroaniline		0.601	0.732	0.718	0.770	0.705	10.3
Dimethyl Phthalate	1.534	1.684	1.695	1.645	1.687	1.649	4.1
Acenaphthylene	1.933	2.036	2.063	1.984	1.993	2.002	2.5
2,6-Dinitrotoluene	0.253	0.306	0.339	0.309	0.322	0.306	10.5
3-Nitroaniline		0.253	0.327	0.356	0.373	0.327	16.2
Acenaphthene *	1.376	1.444	1.441	1.459	1.503	1.445	3.2*
2,4-Dinitrophenol #		0.066	0.106	0.109	0.127	0.102	25.2#
4-Nitrophenol #		0.083	0.115	0.111	0.131	0.110	18.2#

AR300598

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN Calibration Date(s): 10/01/90 10/01/90

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = BN1001020 RRF50 = BN1001050
RRF80 = BN1001080 RRF120= BN1001120 RRF160= BN1001160

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Dibenzofuran	1.574	1.654	1.674	1.624	1.674	1.640	2.6
2,4-Dinitrotoluene	0.257	0.319	0.339	0.340	0.351	0.321	11.7
Diethylphthalate	1.643	1.872	1.904	1.889	1.815	1.825	5.9
4-Chlorophenyl-phenylether	0.637	0.709	0.738	0.746	0.755	0.717	6.7
Fluorene	1.197	1.219	1.192	1.166	1.116	1.178	3.3
4-Nitroaniline		0.086	0.108	0.152	0.158	0.126	27.6
4,6-Dinitro-2-Methylphenol		0.090	0.124	0.141	0.168	0.131	24.9
N-Nitrosodiphenylamine (1) *	0.625	0.640	0.738	0.819	0.873	0.739	14.7*
4-Bromophenyl-phenylether	0.249	0.257	0.296	0.310	0.325	0.287	11.6
Hexachlorobenzene	0.314	0.308	0.340	0.353	0.365	0.336	7.3
Pentachlorophenol *	0.079	0.095	0.139	0.138	0.152	0.121	26.2*
Phenanthrene	1.190	1.163	1.242	1.264	1.288	1.229	4.2
Anthracene	1.116	1.059	1.173	1.189	1.217	1.151	5.5
Di-n-Butylphthalate	1.773	1.796	1.962	1.875	1.850	1.851	4.0
Fluoranthene *	0.818	0.871	0.966	0.905	0.878	0.888	6.1*
Pyrene	2.298	2.248	2.280	2.226	2.007	2.212	5.3
Butylbenzylphthalate	1.132	1.163	1.226	1.254	1.167	1.188	4.2
3,3'-Dichlorobenzidine	0.097	0.143	0.212	0.363	0.364	0.236	52.4
Benzo(a)Anthracene	1.134	1.162	1.206	1.235	1.230	1.193	3.7
Chrysene	1.177	1.292	1.245	1.272	1.162	1.230	4.7
bis(2-Ethylhexyl)phthalate	1.741	1.780	1.718	1.754	1.667	1.732	2.5
Di-n-Octyl Phthalate *	3.265	3.242	3.805	3.722	3.660	3.539	7.5*
Benzo(b)Fluoranthene	1.272	1.347	1.577	1.606	1.679	1.496	11.8
Benzo(k)Fluoranthene	1.409	1.336	1.450	1.399	1.423	1.403	3.0
Benzo(a)Pyrene *	1.119	1.152	1.289	1.325	1.355	1.248	8.5*
Indeno(1,2,3-cd)Pyrene	1.222	0.840	1.056	1.231	1.176	1.105	14.8
Dibenz(a,h)Anthracene	0.906	0.851	0.987	0.957	0.985	0.937	6.2
Benzo(g,h,i)Perylene	1.008	0.870	0.995	0.991	0.959	0.965	5.8
Nitrobenzene-d5	0.434	0.491	0.534	0.529	0.554	0.508	9.3
2-Fluorobiphenyl	1.616	1.642	1.645	1.532	1.604	1.608	2.8
Terphenyl-d14	1.459	1.547	1.567	1.635	1.495	1.541	4.4
Phenol-d5	1.418	1.668	1.704	1.597	1.668	1.611	7.1
2-Fluorophenol	1.773	1.971	2.270	1.884	2.120	2.004	9.8
2,4,6-Tribromophenol	0.135	0.162	0.176	0.181	0.200	0.171	14.2

(1) Cannot be separated from Diphenylamine

AR300599

B

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN2 Calibration Date(s): 10/01/90 10/01/90

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = 2BN1001020 RRF50 = 2BN1001050
RRF80 = 2BN1001080 RRF120= 2BN1001120 RRF160= 2BN1001160

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Phenol *	1.762	1.753	1.807	1.662	1.833	1.763	3.7*
bis(2-Chloroethyl)Ether	1.529	1.483	1.401	1.356	1.295	1.413	6.7
2-Chlorophenol	1.469	1.446	1.372	1.331	1.337	1.391	4.5
1,3-Dichlorobenzene	1.582	1.547	1.476	1.479	1.498	1.516	3.1
1,4-Dichlorobenzene *	1.571	1.523	1.435	1.383	1.384	1.459	5.8*
Benzyl Alcohol	0.790	0.821	0.806	0.811	0.779	0.801	2.1
1,2-Dichlorobenzene	1.509	1.484	1.421	1.392	1.401	1.441	3.6
2-Methylphenol	1.179	1.202	1.169	1.140	1.114	1.161	3.0
bis(2-Chloroisopropyl)Ether	2.196	2.150	2.077	2.061	1.986	2.094	3.9
4-Methylphenol	1.136	1.145	1.001	1.102	1.082	1.093	5.3
N-Nitroso-Di-n-Propylamine #	0.996	0.958	0.918	0.923	0.901	0.939	4.0#
Hexachloroethane	0.572	0.584	0.581	0.588	0.578	0.581	1.0
Nitrobenzene	0.391	0.401	0.373	0.365	0.362	0.378	4.5
Isophorone	0.761	0.758	0.716	0.705	0.712	0.730	3.7
Nitrophenol *	0.206	0.214	0.210	0.215	0.222	0.213	2.8*
2,4-Dimethylphenol	0.351	0.379	0.357	0.352	0.353	0.358	3.3
Benzoic Acid		0.233	0.228	0.217	0.201	0.220	6.4
bis(2-Chloroethoxy)Methane	0.534	0.548	0.522	0.510	0.511	0.525	3.1
2,4-Dichlorophenol *	0.339	0.346	0.336	0.334	0.348	0.341	1.8*
1,2,4-Trichlorobenzene	0.357	0.368	0.356	0.354	0.367	0.360	1.8
Naphthalene	1.076	1.049	0.977	0.951	0.955	1.002	5.7
4-Chloroaniline	0.151	0.263	0.309	0.309	0.286	0.264	24.9
Hexachlorobutadiene *	0.187	0.200	0.197	0.200	0.218	0.200	5.6*
4-Chloro-3-Methylphenol *	0.318	0.342	0.332	0.328	0.322	0.328	2.8*
2-Methylnaphthalene	0.702	0.701	0.651	0.607	0.591	0.650	7.9
Hexachlorocyclopentadiene #	0.270	0.334	0.359	0.383	0.433	0.356	16.9#
2,4,6-Trichlorophenol *	0.390	0.442	0.474	0.517	0.587	0.482	15.5*
2,4,5-Trichlorophenol		0.437	0.396	0.386	0.365	0.396	7.6
2-Chloronaphthalene	1.216	1.250	1.204	1.230	1.266	1.233	2.0
2-Nitroaniline		0.307	0.324	0.326	0.308	0.316	3.2
Dimethyl Phthalate	1.374	1.427	1.370	1.425	1.500	1.419	3.7
Acenaphthylene	1.880	1.952	1.841	1.929	2.064	1.933	4.4
2,6-Dinitrotoluene	0.289	0.302	0.277	0.269	0.259	0.279	6.0
3-Nitroaniline		0.067	0.173	0.222	0.200	0.166	41.4
Acenaphthene *	1.215	1.274	1.238	1.258	1.325	1.262	3.3*
2,4-Dinitrophenol #		0.129	0.131	0.131	0.131	0.131	0.8#
4-Nitrophenol #		0.077	0.075	0.075	0.073	0.075	2.2#

AR300600

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN2 Calibration Date(s): 10/01/90 10/01/90

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = 2BN1001020 RRF50 = 2BN1001050
RRF80 = 2BN1001080 RRF120= 2BN1001120 RRF160= 2BN1001160

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Dibenzofuran	1.507	1.600	1.552	1.579	1.644	1.576	3.3
2,4-Dinitrotoluene	0.325	0.348	0.341	0.344	0.328	0.337	3.0
Diethylphthalate	1.455	1.445	1.341	1.325	1.413	1.396	4.3
4-Chlorophenyl-phenylether	0.626	0.668	0.649	0.662	0.649	0.651	2.5
Fluorene	1.225	1.273	1.228	1.242	1.337	1.261	3.7
4-Nitroaniline		0.067	0.072	0.093	0.080	0.078	14.5
4,6-Dinitro-2-Methylphenol		0.115	0.122	0.134	0.145	0.129	10.3
N-Nitrosodiphenylamine (1) *	0.487	0.444	0.546	0.572	0.562	0.522	10.5*
4-Bromophenyl-phenylether	0.213	0.222	0.265	0.292	0.314	0.261	16.7
Hexachlorobenzene	0.250	0.263	0.311	0.335	0.370	0.306	16.3
Pentachlorophenol *	0.137	0.147	0.180	0.188	0.201	0.171	16.0*
Phenanthrene	1.152	1.158	1.305	1.358	1.455	1.286	10.2
Anthracene	1.015	0.984	1.075	1.090	1.075	1.048	4.4
Di-n-Butylphthalate	1.656	1.635	1.791	1.895	2.002	1.796	8.7
Fluoranthene *	1.004	1.049	1.178	1.232	1.355	1.164	12.2*
Pyrene	2.252	2.336	2.101	2.070	1.972	2.146	6.8
Butylbenzylphthalate	1.198	1.337	1.270	1.291	1.244	1.268	4.1
3,3'-Dichlorobenzidine	0.083	0.128	0.179	0.274	0.363	0.205	55.2
Benzo(a)Anthracene	1.058	1.265	1.300	1.368	1.408	1.280	10.6
Chrysene	1.047	1.295	1.274	1.300	1.297	1.243	8.8
bis(2-Ethylhexyl)phthalate	1.720	1.934	1.871	1.865	1.818	1.842	4.3
Di-n-Octyl Phthalate *	5.365	5.719	6.403	6.747	6.699	6.187	10.0*
Benzo(b)Fluoranthene	1.489	1.586	2.020	2.200	2.537	1.966	22.1
Benzo(k)Fluoranthene	1.306	1.428	1.657	1.843	1.798	1.606	14.5
Benzo(a)Pyrene *	1.057	1.161	1.377	1.525	1.684	1.361	18.9*
Indeno(1,2,3-cd)Pyrene	0.650	0.694	0.838	0.908	0.964	0.811	16.7
Dibenz(a,h)Anthracene	0.588	0.620	0.739	0.838	0.971	0.751	21.0
Benzo(g,h,i)Perylene	0.694	0.726	0.796	0.866	0.895	0.795	10.9
Nitrobenzene-d5	0.393	0.398	0.376	0.361	0.356	0.377	5.0
2-Fluorobiphenyl	1.434	1.451	1.385	1.408	1.484	1.432	2.7
Terphenyl-d14	1.444	1.623	1.554	1.578	1.540	1.548	4.3
Phenol-d5	1.581	1.627	1.596	1.591	1.612	1.601	1.1
2-Fluorophenol	1.423	1.480	1.509	1.510	1.586	1.502	3.9
2,4,6-Tribromophenol	0.135	0.163	0.176	0.192	0.220	0.177	17.9

(1) Cannot be separated from Diphenylamine

AR300601

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN Calibration date: 10/01/90 Time: 1557

Lab File ID: BN1001050 Init. Calib. Date(s): 10/01/90 10/01/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	2.026	1.919	5.3 *
bis(2-Chloroethyl)Ether	2.073	1.921	7.3
2-Chlorophenol	1.578	1.549	1.8
1,3-Dichlorobenzene	1.594	1.622	-1.8
1,4-Dichlorobenzene *	1.742	1.713	1.7 *
Benzyl Alcohol	0.743	0.822	-10.6
1,2-Dichlorobenzene	1.548	1.574	-1.7
2-Methylphenol	1.332	1.310	1.7
bis(2-Chloroisopropyl)Ether	5.585	5.981	-7.1
4-Methylphenol	1.237	1.305	-5.5
N-Nitroso-Di-n-Propylamine #	2.000	2.162	-8.1 #
Hexachloroethane	0.753	0.694	7.8
Nitrobenzene	0.594	0.589	0.8
Isophorone	0.763	0.889	-16.5
2-Nitrophenol *	0.181	0.177	2.2 *
2,4-Dimethylphenol	0.365	0.388	-6.3
Benzoic Acid	0.198	0.166	16.2
bis(2-Chloroethoxy)Methane	0.571	0.589	-3.2
2,4-Dichlorophenol *	0.300	0.316	-5.3 *
1,2,4-Trichlorobenzene	0.339	0.361	-6.5
Naphthalene	1.123	1.161	-3.4
4-Chloroaniline	0.363	0.389	-7.2
Hexachlorobutadiene *	0.195	0.202	-3.6 *
4-Chloro-3-Methylphenol *	0.273	0.284	-4.0 *
2-Methylnaphthalene	0.540	0.592	-9.6
Hexachlorocyclopentadiene #	0.324	0.310	4.3 #
2,4,6-Trichlorophenol *	0.421	0.418	0.7 *
2,4,5-Trichlorophenol	0.429	0.422	1.6
2-Chloronaphthalene	1.390	1.375	1.1
2-Nitroaniline	0.705	0.601	14.8
Dimethyl Phthalate	1.649	1.684	-2.1
Acenaphthylene	2.002	2.036	-1.7
2,6-Dinitrotoluene	0.306	0.306	0.0
3-Nitroaniline	0.327	0.253	22.6
Acenaphthene *	1.445	1.444	0.1 *
2,4-Dinitrophenol #	0.102	0.066	35.3 #
4-Nitrophenol #	0.110	0.083	24.6 #

AR300602

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN Calibration date: 10/01/90 Time: 1557

Lab File ID: BN1001050 Init. Calib. Date(s): 10/01/90 10/01/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.640	1.654	-0.9
2,4-Dinitrotoluene	0.321	0.319	0.6
Diethylphthalate	1.825	1.872	-2.6
4-Chlorophenyl-phenylether	0.717	0.709	1.1
Fluorene	1.178	1.219	-3.5
4-Nitroaniline	0.126	0.086	31.8
4,6-Dinitro-2-Methylphenol	0.131	0.090	31.3
N-Nitrosodiphenylamine (1) *	0.739	0.640	13.4 *
4-Bromophenyl-phenylether	0.287	0.257	10.5
Hexachlorobenzene	0.336	0.308	8.3
Pentachlorophenol *	0.121	0.095	21.5 *
Phenanthrene	1.229	1.163	5.4
Anthracene	1.151	1.059	8.0
Di-n-Butylphthalate	1.851	1.796	3.0
Fluoranthene *	0.888	0.871	1.9 *
Pyrene	2.212	2.248	-1.6
Butylbenzylphthalate	1.188	1.163	2.1
3,3'-Dichlorobenzidine	0.236	0.143	39.4
Benzo(a)Anthracene	1.193	1.162	2.6
Chrysene	1.230	1.292	-5.0
bis(2-Ethylhexyl)phthalate	1.732	1.780	-2.8
Di-n-Octyl Phthalate *	3.539	3.242	8.4 *
Benzo(b)Fluoranthene	1.496	1.347	10.0
Benzo(k)Fluoranthene	1.403	1.336	4.8
Benzo(a)Pyrene *	1.248	1.152	7.7 *
Indeno(1,2,3-cd)Pyrene	1.105	0.840	24.0
Dibenz(a,h)Anthracene	0.937	0.851	9.2
Benzo(g,h,i)Perylene	0.965	0.870	9.8
Nitrobenzene-d5	0.508	0.491	3.3
2-Fluorobiphenyl	1.608	1.642	-2.1
Terphenyl-d14	1.541	1.547	-0.4
Phenol-d5	1.611	1.668	-3.5
2-Fluorophenol	2.004	1.971	1.6
2,4,6-Tribromophenol	0.171	0.162	5.3

(1) Cannot be separated from Diphenylamine

AR300603

0485

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN Calibration date: 10/02/90 Time: 1721

Lab File ID: BN1002050 Init. Calib. Date(s): 10/01/90 10/01/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Phenol	*	2.026	1.949	3.8	*
bis(2-Chloroethyl)Ether		2.073	1.909	7.9	
2-Chlorophenol		1.578	1.578	0.0	
1,3-Dichlorobenzene		1.594	1.618	-1.5	
1,4-Dichlorobenzene	*	1.742	1.775	-1.9	*
Benzyl Alcohol		0.743	0.833	-12.1	
1,2-Dichlorobenzene		1.548	1.553	-0.3	
2-Methylphenol		1.332	1.231	7.6	
bis(2-Chloroisopropyl)Ether		5.585	5.774	-3.4	
4-Methylphenol		1.237	1.188	4.0	
N-Nitroso-Di-n-Propylamine	#	2.000	2.004	-0.2	#
Hexachloroethane		0.753	0.666	11.6	
Nitrobenzene		0.594	0.574	3.4	
Isophorone		0.763	0.872	-14.3	
2-Nitrophenol	*	0.181	0.179	1.1	*
2,4-Dimethylphenol		0.365	0.391	-7.1	
Benzoic Acid		0.198	0.173	12.6	
bis(2-Chloroethoxy)Methane		0.571	0.586	-2.6	
2,4-Dichlorophenol	*	0.300	0.317	-5.7	*
1,2,4-Trichlorobenzene		0.339	0.368	-8.6	
Naphthalene		1.123	1.124	-0.1	
4-Chloroaniline		0.363	0.346	4.7	
Hexachlorobutadiene	*	0.195	0.210	-7.7	*
4-Chloro-3-Methylphenol	*	0.273	0.279	-2.2	*
2-Methylnaphthalene		0.540	0.577	-6.9	
Hexachlorocyclopentadiene	#	0.324	0.335	-3.4	#
2,4,6-Trichlorophenol	*	0.421	0.433	-2.9	*
2,4,5-Trichlorophenol		0.429	0.452	-5.4	
2-Chloronaphthalene		1.390	1.408	-1.3	
2-Nitroaniline		0.705	0.592	16.0	
Dimethyl Phthalate		1.649	1.623	1.6	
Acenaphthylene		2.002	2.030	-1.4	
2,6-Dinitrotoluene		0.306	0.312	-2.0	
3-Nitroaniline		0.327	0.223	31.8	
Acenaphthene	*	1.445	1.417	1.9	*
2,4-Dinitrophenol	#	0.102	0.078	23.5	#
4-Nitrophenol	#	0.110	0.077	30.0	#

AR300604

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN Calibration date: 10/02/90 Time: 1721

Lab File ID: BN1002050 Init. Calib. Date(s): 10/01/90 10/01/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.640	1.579	3.7
2,4-Dinitrotoluene	0.321	0.293	8.7
Diethylphthalate	1.825	1.763	3.4
4-Chlorophenyl-phenylether	0.717	0.682	4.9
Fluorene	1.178	1.125	4.5
4-Nitroaniline	0.126	0.068	46.0
4,6-Dinitro-2-Methylphenol	0.131	0.098	25.2
N-Nitrosodiphenylamine (1) *	0.739	0.618	16.4 *
4-Bromophenyl-phenylether	0.287	0.245	14.6
Hexachlorobenzene	0.336	0.313	6.8
Pentachlorophenol *	0.121	0.117	3.3 *
Phenanthrene	1.229	1.110	9.7
Anthracene	1.151	1.091	5.2
Di-n-Butylphthalate	1.851	1.725	6.8
Fluoranthene *	0.888	0.871	1.9 *
Pyrene	2.212	2.426	-9.7
Butylbenzylphthalate	1.188	1.208	-1.7
3,3'-Dichlorobenzidine	0.236	0.114	51.7
Benzo(a)Anthracene	1.193	1.145	4.0
Chrysene	1.230	1.233	-0.2
bis(2-Ethylhexyl)phthalate	1.732	1.789	-3.3
Di-n-Octyl Phthalate *	3.539	3.234	8.6 *
Benzo(b)Fluoranthene	1.496	1.333	10.9
Benzo(k)Fluoranthene	1.403	1.419	-1.1
Benzo(a)Pyrene *	1.248	1.112	10.9 *
Indeno(1,2,3-cd)Pyrene	1.105	0.826	25.3
Dibenz(a,h)Anthracene	0.937	0.837	10.7
Benzo(g,h,i)Perylene	0.965	0.872	9.6
Nitrobenzene-d5	0.508	0.485	4.5
2-Fluorobiphenyl	1.608	1.671	-3.9
Terphenyl-d14	1.541	1.582	-2.7
Phenol-d5	1.611	1.699	-5.5
2-Fluorophenol	2.004	2.437	-21.6
2,4,6-Tribromophenol	0.171	0.156	8.8

(1) Cannot be separated from Diphenylamine

AR300605

0490

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN Calibration date: 10/03/90 Time: 1630

Lab File ID: BN1003050 Init. Calib. Date(s): 10/01/90 10/01/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	2.026	2.063	-1.8 *
bis(2-Chloroethyl)Ether	2.073	2.050	1.1
2-Chlorophenol	1.578	1.612	-2.2
1,3-Dichlorobenzene	1.594	1.590	0.3
1,4-Dichlorobenzene *	1.742	1.778	-2.1 *
Benzyl Alcohol	0.743	0.859	-15.6
1,2-Dichlorobenzene	1.548	1.548	0.0
2-Methylphenol	1.332	1.278	4.1
bis(2-Chloroisopropyl)Ether	5.585	6.089	-9.0
4-Methylphenol	1.237	1.263	-2.1
N-Nitroso-Di-n-Propylamine #	2.000	2.119	-6.0 #
Hexachloroethane	0.753	0.687	8.8
Nitrobenzene	0.594	0.667	-12.3
Isophorone	0.763	0.994	-30.3
2-Nitrophenol *	0.181	0.195	-7.7 *
2,4-Dimethylphenol	0.365	0.426	-16.7
Benzoic Acid	0.198	0.170	14.1
bis(2-Chloroethoxy)Methane	0.571	0.643	-12.6
2,4-Dichlorophenol *	0.300	0.325	-8.3 *
1,2,4-Trichlorobenzene	0.339	0.365	-7.7
Naphthalene	1.123	1.175	-4.6
4-Chloroaniline	0.363	0.348	4.1
Hexachlorobutadiene *	0.195	0.197	-1.0 *
4-Chloro-3-Methylphenol *	0.273	0.282	-3.3 *
2-Methylnaphthalene	0.540	0.577	-6.9
Hexachlorocyclopentadiene #	0.324	0.318	1.9 #
2,4,6-Trichlorophenol *	0.421	0.406	3.6 *
2,4,5-Trichlorophenol	0.429	0.400	6.8
2-Chloronaphthalene	1.390	1.314	5.5
2-Nitroaniline	0.705	0.630	10.6
Dimethyl Phthalate	1.649	1.619	1.8
Acenaphthylene	2.002	1.944	2.9
2,6-Dinitrotoluene	0.306	0.303	1.0
3-Nitroaniline	0.327	0.210	35.8
Acenaphthene *	1.445	1.444	0.1 *
2,4-Dinitrophenol #	0.102	0.078	23.5 #
4-Nitrophenol #	0.110	0.088	20.0 #

AR300606

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN Calibration date: 10/03/90 Time: 1630

Lab File ID: BN1003050 Init. Calib. Date(s): 10/01/90 10/01/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.640	1.597	2.6
2,4-Dinitrotoluene	0.321	0.297	7.5
Diethylphthalate	1.825	1.816	0.5
4-Chlorophenyl-phenylether	0.717	0.699	2.5
Fluorene	1.178	1.195	-1.4
4-Nitroaniline	0.126	0.061	51.6
4,6-Dinitro-2-Methylphenol	0.131	0.109	16.8
N-Nitrosodiphenylamine (1) *	0.739	0.655	11.4 *
4-Bromophenyl-phenylether	0.287	0.247	13.9
Hexachlorobenzene	0.336	0.307	8.6
Pentachlorophenol *	0.121	0.103	14.9 *
Phenanthrene	1.229	1.160	5.6
Anthracene	1.151	1.049	8.9
Di-n-Butylphthalate	1.851	1.792	3.2
Fluoranthene *	0.888	0.862	2.9 *
Pyrene	2.212	2.148	2.9
Butylbenzylphthalate	1.188	1.215	-2.3
3,3'-Dichlorobenzidine	0.236	0.121	48.7
Benzo(a)Anthracene	1.193	1.194	-0.1
Chrysene	1.230	1.311	-6.6
bis(2-Ethylhexyl)phthalate	1.732	1.821	-5.1
Di-n-Octyl Phthalate *	3.539	3.534	0.1 *
Benzo(b)Fluoranthene	1.496	1.328	11.2
Benzo(k)Fluoranthene	1.403	1.341	4.4
Benzo(a)Pyrene *	1.248	1.093	12.4 *
Indeno(1,2,3-cd)Pyrene	1.105	0.895	19.0
Dibenz(a,h)Anthracene	0.937	0.840	10.4
Benzo(g,h,i)Perylene	0.965	1.002	-3.8
Nitrobenzene-d5	0.508	0.552	-8.7
2-Fluorobiphenyl	1.608	1.591	1.1
Terphenyl-d14	1.541	1.362	11.6
Phenol-d5	1.611	1.741	-8.1
2-Fluorophenol	2.004	2.128	-6.2
2,4,6-Tribromophenol	0.171	0.148	13.5

(1) Cannot be separated from Diphenylamine

AR300607

B 7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN2 Calibration date: 10/03/90 Time: 1320

Lab File ID: 2BN1003050 Init. Calib. Date(s): 10/01/90 10/01/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	1.763	1.689	4.2 *
bis(2-Chloroethyl)Ether	1.413	1.476	-4.5
2-Chlorophenol	1.391	1.396	-0.4
1,3-Dichlorobenzene	1.516	1.562	-3.0
1,4-Dichlorobenzene *	1.459	1.531	-4.9 *
Benzyl Alcohol	0.801	0.761	5.0
1,2-Dichlorobenzene	1.441	1.475	-2.4
2-Methylphenol	1.161	1.155	0.5
bis(2-Chloroisopropyl)Ether	2.094	2.134	-1.9
4-Methylphenol	1.093	1.098	-0.5
N-Nitroso-Di-n-Propylamine #	0.939	0.908	3.3 #
Hexachloroethane	0.581	0.576	0.9
Nitrobenzene	0.378	0.381	-0.8
Isophorone	0.730	0.765	-4.8
2-Nitrophenol *	0.213	0.208	2.3 *
2,4-Dimethylphenol	0.358	0.372	-3.9
Benzoic Acid	0.220	0.212	3.6
bis(2-Chloroethoxy)Methane	0.525	0.540	-2.9
2,4-Dichlorophenol *	0.341	0.345	-1.2 *
1,2,4-Trichlorobenzene	0.360	0.383	-6.4
Naphthalene	1.002	1.063	-6.1
4-Chloroaniline	0.264	0.182	31.1
Hexachlorobutadiene *	0.200	0.211	-5.5 *
4-Chloro-3-Methylphenol *	0.328	0.322	1.8 *
2-Methylnaphthalene	0.650	0.703	-8.2
Hexachlorocyclopentadiene #	0.356	0.362	-1.7 #
2,4,6-Trichlorophenol *	0.482	0.448	7.1 *
2,4,5-Trichlorophenol	0.396	0.436	-10.1
2-Chloronaphthalene	1.233	1.242	-0.7
2-Nitroaniline	0.316	0.269	14.9
Dimethyl Phthalate	1.419	1.437	-1.3
Acenaphthylene	1.933	1.923	0.5
2,6-Dinitrotoluene	0.279	0.300	-7.5
3-Nitroaniline	0.166	0.041	75.3
Acenaphthene *	1.262	1.279	-1.3 *
2,4-Dinitrophenol #	0.131	0.119	9.2 #
4-Nitrophenol #	0.075	0.068	9.3 #

AR300608

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Instrument ID: FINN2 Calibration date: 10/03/90 Time: 1320

Lab File ID: 2BN1003050 Init. Calib. Date(s): 10/01/90 10/01/90

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.576	1.584	-0.5
2,4-Dinitrotoluene	0.337	0.330	2.1
Diethylphthalate	1.396	1.468	-5.2
4-Chlorophenyl-phenylether	0.651	0.674	-3.5
Fluorene	1.261	1.271	-0.8
4-Nitroaniline	0.078	0.067	14.1
4,6-Dinitro-2-Methylphenol	0.129	0.119	7.8
N-Nitrosodiphenylamine (1) *	0.522	0.435	16.7 *
4-Bromophenyl-phenylether	0.261	0.227	13.0
Hexachlorobenzene	0.306	0.280	8.5
Pentachlorophenol *	0.171	0.150	12.3 *
Phenanthrene	1.286	1.177	8.5
Anthracene	1.048	1.004	4.2
Di-n-Butylphthalate	1.796	1.653	8.0
Fluoranthene *	1.164	1.042	10.5 *
Pyrene	2.146	2.461	-14.7
Butylbenzylphthalate	1.268	1.318	-3.9
3,3'-Dichlorobenzidine	0.205	0.127	38.1
Benzo(a)Anthracene	1.280	1.244	2.8
Chrysene	1.243	1.281	-3.1
bis(2-Ethylhexyl)phthalate	1.842	1.992	-8.1
Di-n-Octyl Phthalate *	6.187	5.284	14.6 *
Benzo(b)Fluoranthene	1.966	1.569	20.2
Benzo(k)Fluoranthene	1.606	1.427	11.2
Benzo(a)Pyrene *	1.361	1.103	19.0 *
Indeno(1,2,3-cd)Pyrene	0.811	0.669	17.5
Dibenz(a,h)Anthracene	0.751	0.583	22.4
Benzo(g,h,i)Perylene	0.795	0.703	11.6
Nitrobenzene-d5	0.377	0.385	-2.1
2-Fluorobiphenyl	1.432	1.481	-3.4
Terphenyl-d14	1.548	1.630	-5.3
Phenol-d5	1.601	1.563	2.4
2-Fluorophenol	1.502	1.371	8.7
2,4,6-Tribromophenol	0.177	0.165	6.8

(1) Cannot be separated from Diphenylamine

AR300609

0518

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKS1

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: SBLKS1

Sample wt/vol: 30.0 (g/mL) G Lab File ID: BN1003A

Level: (low/med) LOW Date Received: 08/30/90

% Moisture: not dec. dec. Date Extracted: 09/10/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/03/90

GPC Cleanup: (Y/N) Y pH: Dilution Factor: ~~0.50~~ 1.0 RGB 10/5/90

Number TICs found: 3 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 100-52-7	BENZALDEHYDE (ACN)(DOT)	7.23	220	JX
2.	UNKNOWN	28.79	3700	JX
3.	UNKNOWN	33.11	620	JX

AR300610

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKS2

Lab Name: WEYERHAEUSER Contract: 68D90026

Lab Code: WEYER Case No.: 14797 SAS No.: _____ SDG No.: CBH23

Matrix: (soil/water) SOIL Lab Sample ID: VBLKS2

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A4672

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

% Moisture: not dec. _____ Date Analyzed: 09/06/90

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	14	
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

AR300611