Custody Transfer Record/Lab Work Request

WESTON

WESTON Analytics Use Only: 910HL402

WS-MWRD

Client: Westinghouse Hanford/B.E. Innis
Work Order: EN52C 6a168-02-01/4/91
Date Rec'd.: 4/26/91 Date Due: ~~As specified~~ in SOW 5/31/91
RFW Contact: Peg Beaty
Client Contact/Phone: B.E. Innis (509)376-8978

Refrigerator#									
#/Type Container	2 amber		1 amber glass			1 amber glass 500ml			
Volume	40ml		935ml						
Preservative	ice		ice			ice			
ANALYSES REQUESTED	1	2	3	4	5	6	7	8	9

WA Use Only Lab ID	Client ID/Description 7690	Matrix	Date Collected	1	2	3	4	5	6	7	8	9
001	1)B00T39	DL	4-24-91	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	2)B00V48	DL	4-24-91	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	3)B00V49	DL	4-24-91	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	4)B00V50	DL	4-24-91	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	5)B00V51	DL	4-24-91	✓	✓	✓	✓	✓	✓	✓	✓	✓

ISOB

ANALYSES REQUESTED

1: VOA/Hexone (CLP) 06234H
2: Semi-VOA/TBP (CLP) 06251H
3: Kerosene, PCB's (CLP)
4: ICP Metals (CLP) (Westinghouse ICP)
5: Anions (300.0), Flashpoint (1010)
6: Alpha/Beta (PRO-032-1)
7: Gamma Scan (PRO-042-5)
8: Total Uranium (PRO-032-89)
9: Isotopic Uranium (PRO-052-32)

GCSC-Kerosene
GC/Dul=CLP
TAT=35 days
GCC=Dul Lab L375

Anions=ICCL,ICFL,ICSO4,ICPO4,ICNO3,ICNO2

Matrix: W - Water, DS - Drum Solids, X - Other, S - Soil, O - Oil, DL - Drum Liquids, SE - Sediment, A - Air, F - Fish, SO - Solid, WI - Wipe, L - EP/TCLP Leachate

Special Instructions: Please call to confirm receipt and condition of sample shipment

Item/Reason	Relinquished by	Received by	Date	Time	Item/Reason	Relinquished by	Received by	Date	Time
Delivery			4/26/91	9:30am					
RAD SCRN			4-26-91	9:45am					
SAMPLES			4-26-91	12:05pm					
					SEE WHC C OF C				

WESTON Analytics Use Only

Samples Were:
1 Shipped or Hand-Delivered
NOTES:

2 Ambient or Chilled
NOTES:

3 Received Broken/Leaking (Improperly Sealed) Y N
NOTES:

4 Properly Preserved Y N
NOTES:

5 Received Within Holding Times Y N
NOTES:

COC Tape Was:
1 Present on Outer Package Y N
2 Unbroken on Outer Package Y N
3 Present on Sample Y N
4 Unbroken on Sample Y N
NOTES:

COC Record Was:
1 Present Upon Receipt of Samples Y N

Discrepancies Between Sample Labels and COC Record? Y N
NOTES:

FEB 1996 RECEIVED EDMC

RFW 21-21-001/A-12/88

7-115

910HL402-WES-058

00037717

7A

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 04-26-91
RFW #: 9104L402, GC/MS VOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of five (5) drum samples collected on 04-24-91.

The samples were analyzed according to criteria set forth in CLP SOW 02/88 (Rev. 05/89) for TCL Volatile target compounds on 05-01,03,06-91.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analysis:

1. Non-target compounds were detected in these samples.

2. The following samples required dilutions and medium level analysis because they contained high levels of both target and non-target compounds:

Sample ID	Dilution Factor
B00J39, MS, MSD	100 and Medium
B00V48	200 and Medium
B00V49	100 and Medium
B00V50	50 and Medium
B00V51	100 and Medium

3. All obtainable surrogate recoveries were within EPA QC limits.

4. All matrix spike recoveries were within EPA QC limits.

5. The laboratory blanks contained the common contaminants acetone and methylene chloride at levels less than 3x the CRQL.

6. Internal standard area and retention time criteria were met for all samples and blanks.

Jack R. Tuschall, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

6.5.91
Date

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles by GC/MS, HSL List

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 05/10/91 11:05 Page: 1a

	Cust ID:	BOOJ39		BOOJ39		BOOJ39		BOOV48		BOOV49		BOOV50	
Sample Information	RFW#:	001		001 MS		001 MSD		002		003		004	
	Matrix:	DRUM		DRUM		DRUM		DRUM		DRUM		DRUM	
	D.F.:	125		125		125		250		125		62.5	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
	Level:	MED		MED		MED		MED		MED		MED	
Surrogate Recovery	Toluene-d8	D	%	D	%	D	%	D	%	D	%	D	%
	Bromofluorobenzene	D	%	D	%	D	%	D	%	D	%	D	%
	1,2-Dichloroethane-d4	D	%	D	%	D	%	D	%	D	%	D	%
			fl		fl		fl		fl		fl		fl
Chloromethane		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Bromomethane		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Vinyl Chloride		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Chloroethane		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Methylene Chloride		290000	B	140000	B	100000	B	410000	B	190000	B	43000	B
Acetone		160000	B	190000	B	83000	JB	260000	B	240000	B	74000	B
Carbon Disulfide		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,1-Dichloroethene		62000	U	138	%	131	%	120000	U	62000	U	31000	U
1,1-Dichloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,2-Dichloroethene (total)		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Chloroform		62000	U	62000	U	62000	U	120000	U	62000	U	310Q0	U
1,2-Dichloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
2-Butanone		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
1,1,1-Trichloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Carbon Tetrachloride		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Vinyl Acetate		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Bromodichloromethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,2-Dichloropropane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
cis-1,3-Dichloropropene		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Trichloroethene		62000	U	118	%	117	%	120000	U	62000	U	31000	U
Dibromochloromethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,1,2-Trichloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Benzene		62000	U	119	%	119	%	120000	U	62000	U	31000	U
Trans-1,3-Dichloropropene		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Bromoform		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
4-Methyl-2-pentanone		120000	U	120000	U	120000	U	390000		120000	U	62000	U
2-Hexanone		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Tetrachloroethene		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,1,2,2-Tetrachloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U

*= Outside of EPA CLP QC limits.

Cust ID:	BOOJ39		BOOJ39		BOOJ39		BOOV48		BOOV49		BOOV50	
RFW#:	001		001 MS		001 MSD		002		003		004	
Level:	MED		MED		MED		MED		MED		MED	
Toluene	22000	J	132	%	139	%	140000		150000		92000	
Chlorobenzene	62000	U	110	%	115	%	120000	U	62000	U	31000	U
Ethylbenzene	30000	J	30000	J	32000	J	160000		170000		99000	
Styrene	62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Xylene (total)	650000		420000		430000		1100000		1200000		1000000	

*= Outside of EPA CLP QC limits.

000005

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles by GC/MS, HSL List

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 05/10/91 11:05 Page: 2a

	Cust ID:	BOOV51		VBLK		VBLK		VBLK	
Sample Information	RFW#:	005		91LVX069-MB1		91LVX070-MB1		91LVX071-MB1	
	Matrix:	DRUM		DRUM		SOIL		SOIL	
	D.F.:	125		1.25		1.25		1.25	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg	
	Level:	MED		MED		MED		MED	
Surrogate Recovery	Toluene-d8	D	%	82	%	105	%	93	%
	Bromofluorobenzene	D	%	81	%	103	%	90	%
	1,2-Dichloroethane-d4	D	%	83	%	95	%	97	%
Chloromethane		120000	U	1200	U	1200	U	1200	U
Bromomethane		120000	U	1200	U	1200	U	1200	U
Vinyl Chloride		120000	U	1200	U	1200	U	1200	U
Chloroethane		120000	U	1200	U	1200	U	1200	U
Methylene Chloride		150000	B	1400		1300		800	
Acetone		81000	JB	980	J	2800		1400	
Carbon Disulfide		62000	U	620	U	620	U	620	U
1,1-Dichloroethene		62000	U	620	U	620	U	620	U
1,1-Dichloroethane		62000	U	620	U	620	U	620	U
1,2-Dichloroethene (total)		62000	U	620	U	620	U	620	U
Chloroform		62000	U	620	U	620	U	620	U
1,2-Dichloroethane		62000	U	620	U	620	U	620	U
2-Butanone		120000	U	1200	U	1200	U	1200	U
1,1,1-Trichloroethane		62000	U	620	U	620	U	620	U
Carbon Tetrachloride		62000	U	620	U	620	U	620	U
Vinyl Acetate		120000	U	1200	U	1200	U	1200	U
Bromodichloromethane		62000	U	620	U	620	U	620	U
1,2-Dichloropropane		62000	U	620	U	620	U	620	U
cis-1,3-Dichloropropene		62000	U	620	U	620	U	620	U
Trichloroethene		62000	U	620	U	620	U	620	U
Dibromochloromethane		62000	U	620	U	620	U	620	U
1,1,2-Trichloroethane		62000	U	620	U	620	U	620	U
Benzene		62000	U	620	U	620	U	620	U
Trans-1,3-Dichloropropene		62000	U	620	U	620	U	620	U
Bromoform		62000	U	620	U	620	U	620	U
4-Methyl-2-pentanone		120000	U	1200	U	1200	U	1200	U
2-Hexanone		120000	U	1200	U	1200	U	1200	U
Tetrachloroethene		62000	U	620	U	620	U	620	U
1,1,2,2-Tetrachloroethane		62000	U	620	U	620	U	620	U

*= Outside of EPA CLP QC limits.

Cust ID:	BOOV51		VBLK		VBLK		VBLK	
RFW#:	005		91LVX069-MB1		91LVX070-MB1		91LVX071-MB1	
Level:	MED		MED		MED		MED	
Toluene	22000	J	620	U	620	U	620	U
Chlorobenzene	62000	U	620	U	620	U	620	U
Ethylbenzene	30000	J	620	U	620	U	620	U
Styrene	62000	U	620	U	620	U	620	U
Xylene (total)	630000		620	U	620	U	620	U

*= Outside of EPA CLP QC limits.

0000007

1A
VOLATILE ORGANICS ANALYSIS SHEET 0000022

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5115

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/01/91

Column: (pack/cap) CAP

Dilution Factor: 125

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	120000	U
74-83-9	Bromomethane	120000	U
75-01-4	Vinyl Chloride	120000	U
75-00-3	Chloroethane	120000	U
75-09-2	Methylene Chloride	290000	B
67-64-1	Acetone	160000	B
75-15-0	Carbon Disulfide	62000	U
75-35-4	1,1-Dichloroethene	62000	U
75-34-3	1,1-Dichloroethane	62000	U
540-59-0	1,2-Dichloroethene (total)	62000	U
67-66-3	Chloroform	62000	U
107-06-2	1,2-Dichloroethane	62000	U
78-93-3	2-Butanone	120000	U
71-55-6	1,1,1-Trichloroethane	62000	U
56-23-5	Carbon Tetrachloride	62000	U
108-05-4	Vinyl Acetate	120000	U
75-27-4	Bromodichloromethane	62000	U
78-87-5	1,2-Dichloropropane	62000	U
10061-01-5	cis-1,3-Dichloropropene	62000	U
79-01-6	Trichloroethene	62000	U
124-48-1	Dibromochloromethane	62000	U
79-00-5	1,1,2-Trichloroethane	62000	U
71-43-2	Benzene	62000	U
10061-02-6	Trans-1,3-Dichloropropene	62000	U
75-25-2	Bromoform	62000	U
108-10-1	4-Methyl-2-pentanone	120000	U
591-78-6	2-Hexanone	120000	U
127-18-4	Tetrachloroethene	62000	U
79-34-5	1,1,2,2-Tetrachloroethane	62000	U
108-88-3	Toluene	22000	J
108-90-7	Chlorobenzene	62000	U
100-41-4	Ethylbenzene	30000	J
100-42-5	Styrene	62000	U
1330-20-7	Xylene (total)	650000	

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000023

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-C1-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5115

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/01/91

Column: (pack/cap) CAP

Dilution Factor: 125

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	19.34	1000000	J
2.	HYDROCARBON	19.97	900000	J
3.	HYDROCARBON	20.30	2000000	J
4.	PROPYL BENZENE	20.83	2000000	J
5.	C3 BENZENE	21.10	1000000	J
6.	C3 BENZENE	21.78	1000000	J
7.	C3 BENZENE	22.25	2000000	J
8.	C3 BENZENE	23.28	3000000	J
9.	C4 BENZENE	24.08	1000000	J
10.	UNKNOWN	24.26	1000000	J

1A
VOLATILE ORGANICS ANALYSIS SHEET 0000044

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-002

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5606

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/06/91

Column: (pack/cap) PACK

Dilution Factor: 250

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	250000	U
74-83-9	Bromomethane	250000	U
75-01-4	Vinyl Chloride	250000	U
75-00-3	Chloroethane	250000	U
75-09-2	Methylene Chloride	410000	B
67-64-1	Acetone	260000	B
75-15-0	Carbon Disulfide	120000	U
75-35-4	1,1-Dichloroethene	120000	U
75-34-3	1,1-Dichloroethane	120000	U
540-59-0	1,2-Dichloroethene (total)	120000	U
67-66-3	Chloroform	120000	U
107-06-2	1,2-Dichloroethane	120000	U
78-93-3	2-Butanone	250000	U
71-55-6	1,1,1-Trichloroethane	120000	U
56-23-5	Carbon Tetrachloride	120000	U
108-05-4	Vinyl Acetate	250000	U
75-27-4	Bromodichloromethane	120000	U
78-87-5	1,2-Dichloropropane	120000	U
10061-01-5	cis-1,3-Dichloropropene	120000	U
79-01-6	Trichloroethene	120000	U
124-48-1	Dibromochloromethane	120000	U
79-00-5	1,1,2-Trichloroethane	120000	U
71-43-2	Benzene	120000	U
10061-02-6	Trans-1,3-Dichloropropene	120000	U
75-25-2	Bromoform	120000	U
108-10-1	4-Methyl-2-pentanone	390000	
591-78-6	2-Hexanone	250000	U
127-18-4	Tetrachloroethene	120000	U
79-34-5	1,1,2,2-Tetrachloroethane	120000	U
108-88-3	Toluene	140000	
108-90-7	Chlorobenzene	120000	U
100-41-4	Ethylbenzene	160000	
100-42-5	Styrene	120000	U
1330-20-7	Xylene (total)	1100000	

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000045

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-002

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5606

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/06/91

Column: (pack/cap) PACK

Dilution Factor: 250

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	C8 KETONE	18.29	2000000	J
2.	CYCLOALKANE	19.40	3000000	J
3.	UNKNOWN	20.37	5000000	J
4.	C10 CYLCOALKANE	20.98	4000000	J
5.	UNKNOWN	21.37	4000000	J
6.	ALKANE	21.82	3000000	J
7.	C3 BENZENE	22.30	3000000	J
8.	C4 BENZENE	22.73	1000000	J
9.	C3 BENZENE	23.30	2000000	J
10.	C10 HYDROCARBON	23.77	1000000	J

1A
VOLATILE ORGANICS ANALYSIS SHEET 0000067

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-003

Sample wt/vol: 4.00 (g/mL) G Lab File ID: AX5110

Level: (low/med) MED Date Received: 04/26/91

% Moisture: not dec. 0 Date Analyzed: 05/01/91

Column: (pack/cap) CAP Dilution Factor: 125

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	120000	U
74-83-9	Bromomethane	120000	U
75-01-4	Vinyl Chloride	120000	U
75-00-3	Chloroethane	120000	U
75-09-2	Methylene Chloride	190000	B
67-64-1	Acetone	240000	B
75-15-0	Carbon Disulfide	62000	U
75-35-4	1,1-Dichloroethene	62000	U
75-34-3	1,1-Dichloroethane	62000	U
540-59-0	1,2-Dichloroethene (total)	62000	U
67-66-3	Chloroform	62000	U
107-06-2	1,2-Dichloroethane	62000	U
78-93-3	2-Butanone	120000	U
71-55-6	1,1,1-Trichloroethane	62000	U
56-23-5	Carbon Tetrachloride	62000	U
108-05-4	Vinyl Acetate	120000	U
75-27-4	Bromodichloromethane	62000	U
78-87-5	1,2-Dichloropropane	62000	U
10061-01-5	cis-1,3-Dichloropropene	62000	U
79-01-6	Trichloroethene	62000	U
124-48-1	Dibromochloromethane	62000	U
79-00-5	1,1,2-Trichloroethane	62000	U
71-43-2	Benzene	62000	U
10061-02-6	Trans-1,3-Dichloropropene	62000	U
75-25-2	Bromoform	62000	U
108-10-1	4-Methyl-2-pentanone	120000	U
591-78-6	2-Hexanone	120000	U
127-18-4	Tetrachloroethene	62000	U
79-34-5	1,1,2,2-Tetrachloroethane	62000	U
108-88-3	Toluene	150000	
108-90-7	Chlorobenzene	62000	U
100-41-4	Ethylbenzene	170000	
100-42-5	Styrene	62000	U
1330-20-7	Xylene (total)	1200000	

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000068

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-003

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5110

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/01/91

Column: (pack/cap) CAP

Dilution Factor: 125

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	18.25	900000	J
2.	CYCLOALKANE	19.35	2000000	J
3.	CYCLOALKANE	20.30	2000000	J
4.	UNKNOWN	20.90	2000000	J
5.	ALKANE	21.78	1000000	J
6.	C3 BENZENE	22.25	2000000	J
7.	C4 BENZENE	22.68	900000	J
8.	C3 BENZENE	23.26	2000000	J
9.	C10 HYDROCARBON	23.73	800000	J
10.	C4 BENZENE	24.08	1000000	J

1A
VOLATILE ORGANICS ANALYSIS SHEET 0000089

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-004

Sample wt/vol: 4.00 (g/mL) G Lab File ID: AX5308

Level: (low/med) MED Date Received: 04/26/91

% Moisture: not dec. 0 Date Analyzed: 05/03/91

Column: (pack/cap) CAP Dilution Factor: 62.5

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	62000	U
74-83-9	Bromomethane	62000	U
75-01-4	Vinyl Chloride	62000	U
75-00-3	Chloroethane	62000	U
75-09-2	Methylene Chloride	43000	B
67-64-1	Acetone	74000	B
75-15-0	Carbon Disulfide	31000	U
75-35-4	1,1-Dichloroethene	31000	U
75-34-3	1,1-Dichloroethane	31000	U
540-59-0	1,2-Dichloroethene (total)	31000	U
67-66-3	Chloroform	31000	U
107-06-2	1,2-Dichloroethane	31000	U
78-93-3	2-Butanone	62000	U
71-55-6	1,1,1-Trichloroethane	31000	U
56-23-5	Carbon Tetrachloride	31000	U
108-05-4	Vinyl Acetate	62000	U
75-27-4	Bromodichloromethane	31000	U
78-87-5	1,2-Dichloropropane	31000	U
10061-01-5	cis-1,3-Dichloropropene	31000	U
79-01-6	Trichloroethene	31000	U
124-48-1	Dibromochloromethane	31000	U
79-00-5	1,1,2-Trichloroethane	31000	U
71-43-2	Benzene	31000	U
10061-02-6	Trans-1,3-Dichloropropene	31000	U
75-25-2	Bromoform	31000	U
108-10-1	4-Methyl-2-pentanone	62000	U
591-78-6	2-Hexanone	62000	U
127-18-4	Tetrachloroethene	31000	U
79-34-5	1,1,2,2-Tetrachloroethane	31000	U
108-88-3	Toluene	92000	
108-90-7	Chlorobenzene	31000	U
100-41-4	Ethylbenzene	99000	
100-42-5	Styrene	31000	U
1330-20-7	Xylene (total)	1000000	

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000090

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5308

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/03/91

Column: (pack/cap) CAP

Dilution Factor: 62.5

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOALKANE	18.55	500000	J
2.	CYCLOALKANE	19.41	700000	J
3.	UNKNOWN	20.36	900000	J
4.	C10 HYDROCARBON	20.42	600000	J
5.	C10 ALKENE	20.95	1000000	J
6.	C3 BENZENE	21.40	1000000	J
7.	ALKANE	21.85	1000000	J
8.	C3 BENZENE	22.33	900000	J
9.	C3 BENZENE	23.31	600000	J
10.	C4 BENZENE	24.14	400000	J

1A
VOLATILE ORGANICS ANALYSIS SHEET

0000111

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5305

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/03/91

Column: (pack/cap) CAP

Dilution Factor: 125

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	120000	U
74-83-9	Bromomethane	120000	U
75-01-4	Vinyl Chloride	120000	U
75-00-3	Chloroethane	120000	U
75-09-2	Methylene Chloride	150000	B
67-64-1	Acetone	81000	JB
75-15-0	Carbon Disulfide	62000	U
75-35-4	1,1-Dichloroethene	62000	U
75-34-3	1,1-Dichloroethane	62000	U
540-59-0	1,2-Dichloroethene (total)	62000	U
67-66-3	Chloroform	62000	U
107-06-2	1,2-Dichloroethane	62000	U
78-93-3	2-Butanone	120000	U
71-55-6	1,1,1-Trichloroethane	62000	U
56-23-5	Carbon Tetrachloride	62000	U
108-05-4	Vinyl Acetate	120000	U
75-27-4	Bromodichloromethane	62000	U
78-87-5	1,2-Dichloropropane	62000	U
10061-01-5	cis-1,3-Dichloropropene	62000	U
79-01-6	Trichloroethene	62000	U
124-48-1	Dibromochloromethane	62000	U
79-00-5	1,1,2-Trichloroethane	62000	U
71-43-2	Benzene	62000	U
10061-02-6	Trans-1,3-Dichloropropene	62000	U
75-25-2	Bromoform	62000	U
108-10-1	4-Methyl-2-pentanone	120000	U
591-78-6	2-Hexanone	120000	U
127-18-4	Tetrachloroethene	62000	U
79-34-5	1,1,2,2-Tetrachloroethane	62000	U
108-88-3	Toluene	22000	J
108-90-7	Chlorobenzene	62000	U
100-41-4	Ethylbenzene	30000	J
100-42-5	Styrene	62000	U
1330-20-7	Xylene (total)	630000	

1E

VOLATILE ORGANICS ANALYSIS SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

0000112

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5305

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/03/91

Column: (pack/cap) CAP

Dilution Factor: 125

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	15.84	1000000	J
2.	C8 KETONE	18.32	1000000	J
3.	CYCLOALKANE	19.41	1000000	J
4.	UNKNOWN	20.37	2000000	J
5.	UNKNOWN	20.90	2000000	J
6.	C3 BENZENE	21.17	1000000	J
7.	C3 BENZENE	22.32	2000000	J
8.	C3 BENZENE	23.35	3000000	J
9.	C4 BENZENE	24.15	1000000	J
10.	UNKNOWN	24.31	1000000	J

BEST AVAILABLE COPY

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 04-26-91
RFW #: 9104L402, SEMIVOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of five (5) drum liquid samples collected on 04-24-91.

The samples were extracted on 04-29-91 and analyzed according to criteria set forth in SW 846 Method 8270 for TCL Semivolatile and Tributylphosphate target compounds on 06-03,07-91.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analysis:

1. Non-target compounds were detected in these samples.

2. The following samples required dilutions because they contained high levels of target compounds:

Sample ID	Dilution Factor
B00J39	5
B00V51	10

3. All surrogate recoveries were within EPA QC limits.

4. All blank spike recoveries were within EPA QC limits.

5. All matrix spike recoveries were within EPA QC limits.

6. Internal standard area and retention time criteria were met for all samples and blanks.

6. 19. 91.

Jack R. Tuschall, Ph.D. Date
Laboratory Manager
Lionville Analytical Laboratory

Roy F. Weston, Inc. - Lionville Laboratory
Semivolatiles by GC/MS, HSL List

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 06/12/91 16:19 Page: 1a

	Cust ID:	BOOJ39	BOOJ39	BOOJ39	BOOJ39	BOOV48	BOOV49
Sample Information	RFW#:	001	001 DL	001 MS	001 MSD	002	003
	Matrix:	DRUM	DRUM	DRUM	DRUM	DRUM	DRUM
	D.F.:	100	500	100	100	100	100
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate Recovery	Nitrobenzene-d5	119 %	75 %	83 %	90 %	85 %	85 %
	2-Fluorobiphenyl	109 %	95 %	92 %	96 %	102 %	99 %
	p-Terphenyl-d14	115 %	85 %	94 %	99 %	99 %	96 %
	Phenol-d5	82 %	69 %	67 %	68 %	67 %	67 %
	2-Fluorophenol	102 %	85 %	81 %	66 %	82 %	82 %
	2,4,6-Tribromophenol	94 %	51 %	82 %	94 %	72 %	68 %
Phenol		1000000 U	NA	71 %	72 %	1000000 U	830000 U
bis(2-Chloroethyl)ether		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2-Chlorophenol		1000000 U	NA	68 %	70 %	1000000 U	830000 U
1,3-Dichlorobenzene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
1,4-Dichlorobenzene		1000000 U	NA	69 %	72 %	1000000 U	830000 U
Benzyl alcohol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
1,2-Dichlorobenzene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2-Methylphenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
bis(2-Chloroisopropyl)ether		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Methylphenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
N-Nitroso-Di-n-propylamine		1000000 U	NA	78 %	81 %	1000000 U	830000 U
Hexachloroethane		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Nitrobenzene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Isophorone		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2-Nitrophenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,4-Dimethylphenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzoic acid		5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
bis(2-Chloroethoxy)methane		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,4-Dichlorophenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
1,2,4-Trichlorobenzene		1000000 U	NA	79 %	86 %	1000000 U	830000 U
Naphthalene		120000 J	NA	120000 J	110000 J	1000000 U	830000 U
4-Chloroaniline		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Hexachlorobutadiene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Chloro-3-methylphenol		1000000 U	NA	70 %	76 %	1000000 U	830000 U
2-Methylnaphthalene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Hexachlorocyclopentadiene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U

*= Outside of EPA CLP QC limits.

Cust ID:	B00J39	B00J39	B00J39	B00J39	B00V48	B00V49
RFW#:	001	001 DL	001 MS	001 MSD	002	003
2,4,6-Trichlorophenol	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,4,5-Trichlorophenol	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
2-Chloronaphthalene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2-Nitroaniline	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
Dimethylphthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Acenaphthylene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,6-Dinitrotoluene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
3-Nitroaniline	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
Acenaphthene	1000000 U	NA	86 %	90 %	1000000 U	830000 U
2,4-Dinitrophenol	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
4-Nitrophenol	5000000 U	NA	70 %	78 %	5000000 U	4200000 U
Dibenzofuran	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,4-Dinitrotoluene	1000000 U	NA	74 %	81 %	1000000 U	830000 U
Diethylphthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Chlorophenyl-phenylether	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Fluorene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Nitroaniline	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
4,6-Dinitro-2-methylphenol	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
N-Nitrosodiphenylamine (1)	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Bromophenyl-phenylether	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Hexachlorobenzene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Pentachlorophenol	5000000 U	NA	63 %	71 %	5000000 U	4200000 U
Phenanthrene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Anthracene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Di-n-Butylphthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Fluoranthene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Pyrene	1000000 U	NA	85 %	88 %	1000000 U	830000 U
Butylbenzylphthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
3,3'-Dichlorobenzidine	2000000 U	NA	2000000 U	2000000 U	2000000 U	1700000 U
Benzo(a)anthracene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Chrysene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
bis(2-Ethylhexyl)phthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Di-n-Octyl phthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzo(b)fluoranthene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzo(k)fluoranthene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzo(a)pyrene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Indeno(1,2,3-cd)pyrene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Dibenzo(a,h)anthracene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzo(g,h,i)perylene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Tributylphosphate	E	0.30E+08	0.24E+08	0.26E+08	1000000 U	830000 U

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

Roy F. Weston, Inc. - Lionville Laboratory
Semivolatiles by GC/MS, HSL List

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 06/12/91 16:19 Page: 2a

	Cust ID:	BOOV50		BOOV51		BOOV51		SBLK		SBLK BS	
Sample Information	RFW#:	004		005		005 DL		91LE0556-MB1		91LE0556-MB1	
	Matrix:	DRUM		DRUM		DRUM		SOIL		SOIL	
	D.F.:	100		100		1000		100		100	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	Nitrobenzene-d5	95	%	84	%	79	%	103	%	102	%
	2-Fluorobiphenyl	97	%	94	%	90	%	110	%	111	%
	p-Terphenyl-d14	99	%	95	%	82	%	106	%	113	%
	Phenol-d5	71	%	60	%	69	%	94	%	93	%
	2-Fluorophenol	88	%	73	%	85	%	109	%	107	%
	2,4,6-Tribromophenol	80	%	72	%	26	%	92	%	96	%
Phenol		770000	U	910000	U	NA		1000000	U	90	%
bis(2-Chloroethyl)ether		770000	U	910000	U	NA		1000000	U	1000000	U
2-Chlorophenol		770000	U	910000	U	NA		1000000	U	96	%
1,3-Dichlorobenzene		770000	U	910000	U	NA		1000000	U	1000000	U
1,4-Dichlorobenzene		770000	U	910000	U	NA		1000000	U	93	%
Benzyl alcohol		770000	U	910000	U	NA		1000000	U	1000000	U
1,2-Dichlorobenzene		770000	U	910000	U	NA		1000000	U	1000000	U
2-Methylphenol		770000	U	910000	U	NA		1000000	U	1000000	U
bis(2-Chloroisopropyl)ether		770000	U	910000	U	NA		1000000	U	1000000	U
4-Methylphenol		770000	U	910000	U	NA		1000000	U	1000000	U
N-Nitroso-Di-n-propylamine		770000	U	910000	U	NA		1000000	U	87	%
Hexachloroethane		770000	U	910000	U	NA		1000000	U	1000000	U
Nitrobenzene		770000	U	910000	U	NA		1000000	U	1000000	U
Isophorone		770000	U	910000	U	NA		1000000	U	1000000	U
2-Nitrophenol		770000	U	910000	U	NA		1000000	U	1000000	U
2,4-Dimethylphenol		770000	U	910000	U	NA		1000000	U	1000000	U
Benzoic acid		3800000	U	4500000	U	NA		5000000	U	5000000	U
bis(2-Chloroethoxy)methane		770000	U	910000	U	NA		1000000	U	1000000	U
2,4-Dichlorophenol		770000	U	910000	U	NA		1000000	U	1000000	U
1,2,4-Trichlorobenzene		770000	U	910000	U	NA		1000000	U	99	%
Naphthalene		770000	U	110000	J	NA		1000000	U	1000000	U
4-Chloroaniline		770000	U	910000	U	NA		1000000	U	1000000	U
Hexachlorobutadiene		770000	U	910000	U	NA		1000000	U	1000000	U
4-Chloro-3-methylphenol		770000	U	910000	U	NA		1000000	U	93	%
2-Methylnaphthalene		770000	U	910000	U	NA		1000000	U	1000000	U
Hexachlorocyclopentadiene		770000	U	910000	U	NA		1000000	U	1000000	U

*= Outside of EPA CLP QC limits.

Cust ID:	BOOV50		BOOV51		BOOV51	SBLK		SBLK BS	
RFW#:	004		005		005 DL	91LE0556-MB1		91LE0556-MB1	
2,4,6-Trichlorophenol	770000	U	910000	U	NA	1000000	U	1000000	U
2,4,5-Trichlorophenol	3800000	U	4500000	U	NA	5000000	U	5000000	U
2-Chloronaphthalene	770000	U	910000	U	NA	1000000	U	1000000	U
2-Nitroaniline	3800000	U	4500000	U	NA	5000000	U	5000000	U
Dimethylphthalate	770000	U	910000	U	NA	1000000	U	1000000	U
Acenaphthylene	770000	U	910000	U	NA	1000000	U	1000000	U
2,6-Dinitrotoluene	770000	U	910000	U	NA	1000000	U	1000000	U
3-Nitroaniline	3800000	U	4500000	U	NA	5000000	U	5000000	U
Acenaphthene	770000	U	910000	U	NA	1000000	U	105	%
2,4-Dinitrophenol	3800000	U	4500000	U	NA	5000000	U	5000000	U
4-Nitrophenol	3800000	U	4500000	U	NA	5000000	U	75	%
Dibenzofuran	770000	U	910000	U	NA	1000000	U	1000000	U
2,4-Dinitrotoluene	770000	U	910000	U	NA	1000000	U	84	%
Diethylphthalate	770000	U	910000	U	NA	1000000	U	1000000	U
4-Chlorophenyl-phenylether	770000	U	910000	U	NA	1000000	U	1000000	U
Fluorene	770000	U	910000	U	NA	1000000	U	1000000	U
4-Nitroaniline	3800000	U	4500000	U	NA	5000000	U	5000000	U
4,6-Dinitro-2-methylphenol	3800000	U	4500000	U	NA	5000000	U	5000000	U
N-Nitrosodiphenylamine (1)	770000	U	910000	U	NA	1000000	U	1000000	U
4-Bromophenyl-phenylether	770000	U	910000	U	NA	1000000	U	1000000	U
Hexachlorobenzene	770000	U	910000	U	NA	1000000	U	1000000	U
Pentachlorophenol	3800000	U	4500000	U	NA	5000000	U	89	%
Phenanthrene	770000	U	910000	U	NA	1000000	U	1000000	U
Anthracene	770000	U	910000	U	NA	1000000	U	1000000	U
Di-n-Butylphthalate	770000	U	910000	U	NA	1000000	U	1000000	U
Fluoranthene	770000	U	910000	U	NA	1000000	U	1000000	U
Pyrene	770000	U	910000	U	NA	1000000	U	103	%
Butylbenzylphthalate	770000	U	910000	U	NA	1000000	U	1000000	U
3,3'-Dichlorobenzidine	1500000	U	1800000	U	NA	2000000	U	2000000	U
Benzo(a)anthracene	770000	U	910000	U	NA	1000000	U	1000000	U
Chrysene	770000	U	910000	U	NA	1000000	U	1000000	U
bis(2-Ethylhexyl)phthalate	770000	U	910000	U	NA	1000000	U	1000000	U
Di-n-Octyl phthalate	770000	U	910000	U	NA	1000000	U	1000000	U
Benzo(b)fluoranthene	770000	U	910000	U	NA	1000000	U	1000000	U
Benzo(k)fluoranthene	770000	U	910000	U	NA	1000000	U	1000000	U
Benzo(a)pyrene	770000	U	910000	U	NA	1000000	U	1000000	U
Indeno(1,2,3-cd)pyrene	770000	U	910000	U	NA	1000000	U	1000000	U
Dibenzo(a,h)anthracene	770000	U	910000	U	NA	1000000	U	1000000	U
Benzo(g,h,i)perylene	770000	U	910000	U	NA	1000000	U	1000000	U
Tributylphosphate	770000	U		E	0.23E+08	1000000	U	1000000	U

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

0007

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000022

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: V060313

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/03/91

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

Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	1000000	U
111-44-4	bis(2-Chloroethyl)ether	1000000	U
95-57-8	2-Chlorophenol	1000000	U
541-73-1	1,3-Dichlorobenzene	1000000	U
106-46-7	1,4-Dichlorobenzene	1000000	U
100-51-6	Benzyl alcohol	1000000	U
95-50-1	1,2-Dichlorobenzene	1000000	U
95-48-7	2-Methylphenol	1000000	U
108-60-1	bis(2-Chloroisopropyl)ether	1000000	U
106-44-5	4-Methylphenol	1000000	U
621-64-7	N-Nitroso-Di-n-propylamine	1000000	U
67-72-1	Hexachloroethane	1000000	U
98-95-3	Nitrobenzene	1000000	U
78-59-1	Isophorone	1000000	U
88-75-5	2-Nitrophenol	1000000	U
105-67-9	2,4-Dimethylphenol	1000000	U
65-85-0	Benzoic acid	5000000	U
111-91-1	bis(2-Chloroethoxy)methane	1000000	U
120-83-2	2,4-Dichlorophenol	1000000	U
120-82-1	1,2,4-Trichlorobenzene	1000000	U
91-20-3	Naphthalene	120000	J
106-47-8	4-Chloroaniline	1000000	U
87-68-3	Hexachlorobutadiene	1000000	U
59-50-7	4-Chloro-3-methylphenol	1000000	U
91-57-6	2-Methylnaphthalene	1000000	U
77-47-4	Hexachlorocyclopentadiene	1000000	U
88-06-2	2,4,6-Trichlorophenol	1000000	U
95-95-4	2,4,5-Trichlorophenol	5000000	U
91-58-7	2-Chloronaphthalene	1000000	U
88-74-4	2-Nitroaniline	5000000	U
131-11-3	Dimethylphthalate	1000000	U
208-96-8	Acenaphthylene	1000000	U
606-20-2	2,6-Dinitrotoluene	1000000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000023

CLIENT SAMPLE NO.

B00J39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-001

Sample wt/vol: 1.00 (g/mL) G Lab File ID: V060313

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/03/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	5000000	U
83-32-9	Acenaphthene	1000000	U
51-28-5	2,4-Dinitrophenol	5000000	U
100-02-7	4-Nitrophenol	5000000	U
132-64-9	Dibenzofuran	1000000	U
121-14-2	2,4-Dinitrotoluene	1000000	U
84-66-2	Diethylphthalate	1000000	U
7005-72-3	4-Chlorophenyl-phenylether	1000000	U
86-73-7	Fluorene	1000000	U
100-01-6	4-Nitroaniline	5000000	U
534-52-1	4,6-Dinitro-2-methylphenol	5000000	U
86-30-6	N-Nitrosodiphenylamine (1)	1000000	U
101-55-3	4-Bromophenyl-phenylether	1000000	U
118-74-1	Hexachlorobenzene	1000000	U
87-86-5	Pentachlorophenol	5000000	U
85-01-8	Phenanthrene	1000000	U
120-12-7	Anthracene	1000000	U
84-74-2	Di-n-Butylphthalate	1000000	U
206-44-0	Fluoranthene	1000000	U
129-00-0	Pyrene	1000000	U
85-68-7	Butylbenzylphthalate	1000000	U
91-94-1	3,3'-Dichlorobenzidine	2000000	U
56-55-3	Benzo(a)anthracene	1000000	U
218-01-9	Chrysene	1000000	U
117-81-7	bis(2-Ethylhexyl)phthalate	1000000	U
117-84-0	Di-n-Octyl phthalate	1000000	U
205-99-2	Benzo(b)fluoranthene	1000000	U
207-08-9	Benzo(k)fluoranthene	1000000	U
50-32-8	Benzo(a)pyrene	1000000	U
193-39-5	Indeno(1,2,3-cd)pyrene	1000000	U
53-70-3	Dibenzo(a,h)anthracene	1000000	U
191-24-2	Benzo(g,h,i)perylene	1000000	U

(1) - Cannot be separated from Diphenylamine

1D
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000024

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: V060313

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/03/91

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

Dilution Factor: 100

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

CAS NO.	COMPOUND		
126-73-8	Tributylphosphate		E

FORM 1 SV-3

12/88 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000025

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: V060313

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/03/91

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

Dilution Factor: 100

Number TICs found: 21

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOALKANE	4.18	10000000	J
2.	ETHYLMETHYLCYCLOHEXANE	4.23	10000000	J
3.	ALKANE	4.41	40000000	J
4.	ETHYLMETHYLCYCLOHEXANE	4.59	10000000	J
5.	C3 CYCLOHEXANE	4.81	20000000	J
6.	ALKANE	5.00	60000000	J
7.	ALKANE	5.14	30000000	J
8.	UNKNOWN	5.46	40000000	J
9.	ALKANE	5.52	30000000	J
10.	UNKNOWN	5.64	20000000	J
11.	CYCLOALKANE	5.73	40000000	J
12.	CYCLOALKANE	5.89	40000000	J
13.	ALKANE	6.12	70000000	J
14.	UNKNOWN	6.33	20000000	J
15.	ALKANE	6.49	40000000	J
16.	TRIMETHYLBENZENE	6.55	20000000	J
17.	ALKYL CYCLOHEXANE	6.68	20000000	J
18.	HYDROCARBON	6.73	20000000	J
19.	C4 BENZENE	6.98	10000000	J
20.	UNKNOWN	7.11	20000000	J
21.	ALKANE	7.63	20000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000061

CLIENT SAMPLE NO.

BOOJ39DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001 DL

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060708

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 500

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

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

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000062

CLIENT SAMPLE NO.

BOOJ39DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001 DL

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060708

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 500

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

(1) - Cannot be separated from Diphenylamine

1D
SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000063

CLIENT SAMPLE NO.

BOOJ39DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001 DL

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060708

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 500

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
126-73-8	Tributylphosphate	0.30E+08	

FORM 1 SV-3

12/88 Rev.

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000072

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-002

Sample wt/vol: 1.00 (g/mL) G Lab File ID: J060711

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	1000000	U
111-44-4	bis(2-Chloroethyl)ether	1000000	U
95-57-8	2-Chlorophenol	1000000	U
541-73-1	1,3-Dichlorobenzene	1000000	U
106-46-7	1,4-Dichlorobenzene	1000000	U
100-51-6	Benzyl alcohol	1000000	U
95-50-1	1,2-Dichlorobenzene	1000000	U
95-48-7	2-Methylphenol	1000000	U
108-60-1	bis(2-Chloroisopropyl)ether	1000000	U
106-44-5	4-Methylphenol	1000000	U
621-64-7	N-Nitroso-Di-n-propylamine	1000000	U
67-72-1	Hexachloroethane	1000000	U
98-95-3	Nitrobenzene	1000000	U
78-59-1	Isophorone	1000000	U
88-75-5	2-Nitrophenol	1000000	U
105-67-9	2,4-Dimethylphenol	1000000	U
65-85-0	Benzoic acid	5000000	U
111-91-1	bis(2-Chloroethoxy)methane	1000000	U
120-83-2	2,4-Dichlorophenol	1000000	U
120-82-1	1,2,4-Trichlorobenzene	1000000	U
91-20-3	Naphthalene	1000000	U
106-47-8	4-Chloroaniline	1000000	U
87-68-3	Hexachlorobutadiene	1000000	U
59-50-7	4-Chloro-3-methylphenol	1000000	U
91-57-6	2-Methylnaphthalene	1000000	U
77-47-4	Hexachlorocyclopentadiene	1000000	U
88-06-2	2,4,6-Trichlorophenol	1000000	U
95-95-4	2,4,5-Trichlorophenol	5000000	U
91-58-7	2-Chloronaphthalene	1000000	U
88-74-4	2-Nitroaniline	5000000	U
131-11-3	Dimethylphthalate	1000000	U
208-96-8	Acenaphthylene	1000000	U
606-20-2	2,6-Dinitrotoluene	1000000	U

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000073

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-002

Sample wt/vol: 1.00 (g/mL) G Lab File ID: J060711

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	5000000	U
83-32-9	Acenaphthene	1000000	U
51-28-5	2,4-Dinitrophenol	5000000	U
100-02-7	4-Nitrophenol	5000000	U
132-64-9	Dibenzofuran	1000000	U
121-14-2	2,4-Dinitrotoluene	1000000	U
84-66-2	Diethylphthalate	1000000	U
7005-72-3	4-Chlorophenyl-phenylether	1000000	U
86-73-7	Fluorene	1000000	U
100-01-6	4-Nitroaniline	5000000	U
534-52-1	4,6-Dinitro-2-methylphenol	5000000	U
86-30-6	N-Nitrosodiphenylamine (1)	1000000	U
101-55-3	4-Bromophenyl-phenylether	1000000	U
118-74-1	Hexachlorobenzene	1000000	U
87-86-5	Pentachlorophenol	5000000	U
85-01-8	Phenanthrene	1000000	U
120-12-7	Anthracene	1000000	U
84-74-2	Di-n-Butylphthalate	1000000	U
206-44-0	Fluoranthene	1000000	U
129-00-0	Pyrene	1000000	U
85-68-7	Butylbenzylphthalate	1000000	U
91-94-1	3,3'-Dichlorobenzidine	2000000	U
56-55-3	Benzo(a)anthracene	1000000	U
218-01-9	Chrysene	1000000	U
117-81-7	bis(2-Ethylhexyl)phthalate	1000000	U
117-84-0	Di-n-Octyl phthalate	1000000	U
205-99-2	Benzo(b)fluoranthene	1000000	U
207-08-9	Benzo(k)fluoranthene	1000000	U
50-32-8	Benzo(a)pyrene	1000000	U
193-39-5	Indeno(1,2,3-cd)pyrene	1000000	U
53-70-3	Dibenzo(a,h)anthracene	1000000	U
191-24-2	Benzo(g,h,i)perylene	1000000	U

(1) - Cannot be separated from Diphenylamine

1D
SEMIVOLATILE ORGANICS ANALYSIS SHEET 000074

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-002

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060711

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
126-73-8	Tributylphosphate	1000000	U

FORM 1 SV-3

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1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

0000075

CLIENT SAMPLE NO.

B00V48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-002

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060711

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOALKANE	5.36	800000	J
2.	ETHYLMETHYLCYCLOHEXANE	5.42	2000000	J
3.	ALKANE	5.56	4000000	J
4.	ETHYLMETHYLCYCLOHEXANE	5.76	2000000	J
5.	CYCLOALKANE	6.00	2000000	J
6.	UNKNOWN	6.16	6000000	J
7.	ALKANE	6.31	1000000	J
8.	ALKANE	6.52	3000000	J
9.	CYCLOALKANE	6.68	10000000	J
10.	ALKANE	6.81	4000000	J
11.	UNKNOWN	6.98	2000000	J
12.	UNKNOWN	7.11	7000000	J
13.	ALKANE	7.33	10000000	J
14.	ALKANE	7.70	4000000	J
15.	DIETHYLBENZENE	7.82	2000000	J
16.	CYCLOHEXANE	7.94	3000000	J
17.	C4 BENZENE	8.26	2000000	J
18.	ALKANE	8.37	2000000	J
19.	DECAHYDRONAPHTHALENE	8.42	1000000	J
20.	ALKANE	8.97	2000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000103

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-003

Sample wt/vol: 1.20 (g/mL) G Lab File ID: J060712

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	830000	U
111-44-4	bis(2-Chloroethyl)ether	830000	U
95-57-8	2-Chlorophenol	830000	U
541-73-1	1,3-Dichlorobenzene	830000	U
106-46-7	1,4-Dichlorobenzene	830000	U
100-51-6	Benzyl alcohol	830000	U
95-50-1	1,2-Dichlorobenzene	830000	U
95-48-7	2-Methylphenol	830000	U
108-60-1	bis(2-Chloroisopropyl)ether	830000	U
106-44-5	4-Methylphenol	830000	U
621-64-7	N-Nitroso-Di-n-propylamine	830000	U
67-72-1	Hexachloroethane	830000	U
98-95-3	Nitrobenzene	830000	U
78-59-1	Isophorone	830000	U
88-75-5	2-Nitrophenol	830000	U
105-67-9	2,4-Dimethylphenol	830000	U
65-85-0	Benzoic acid	4200000	U
111-91-1	bis(2-Chloroethoxy)methane	830000	U
120-83-2	2,4-Dichlorophenol	830000	U
120-82-1	1,2,4-Trichlorobenzene	830000	U
91-20-3	Naphthalene	830000	U
106-47-8	4-Chloroaniline	830000	U
87-68-3	Hexachlorobutadiene	830000	U
59-50-7	4-Chloro-3-methylphenol	830000	U
91-57-6	2-Methylnaphthalene	830000	U
77-47-4	Hexachlorocyclopentadiene	830000	U
88-06-2	2,4,6-Trichlorophenol	830000	U
95-95-4	2,4,5-Trichlorophenol	4200000	U
91-58-7	2-Chloronaphthalene	830000	U
88-74-4	2-Nitroaniline	4200000	U
131-11-3	Dimethylphthalate	830000	U
208-96-8	Acenaphthylene	830000	U
606-20-2	2,6-Dinitrotoluene	830000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000104

CLIENT SAMPLE NO.

B00V49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-003

Sample wt/vol: 1.20 (g/mL) G Lab File ID: J060712

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	4200000	U
83-32-9	Acenaphthene	830000	U
51-28-5	2,4-Dinitrophenol	4200000	U
100-02-7	4-Nitrophenol	4200000	U
132-64-9	Dibenzofuran	830000	U
121-14-2	2,4-Dinitrotoluene	830000	U
84-66-2	Diethylphthalate	830000	U
7005-72-3	4-Chlorophenyl-phenylether	830000	U
86-73-7	Fluorene	830000	U
100-01-6	4-Nitroaniline	4200000	U
534-52-1	4,6-Dinitro-2-methylphenol	4200000	U
86-30-6	N-Nitrosodiphenylamine (1)	830000	U
101-55-3	4-Bromophenyl-phenylether	830000	U
118-74-1	Hexachlorobenzene	830000	U
87-86-5	Pentachlorophenol	4200000	U
85-01-8	Phenanthrene	830000	U
120-12-7	Anthracene	830000	U
84-74-2	Di-n-Butylphthalate	830000	U
206-44-0	Fluoranthene	830000	U
129-00-0	Pyrene	830000	U
85-68-7	Butylbenzylphthalate	830000	U
91-94-1	3,3'-Dichlorobenzidine	1700000	U
56-55-3	Benzo(a)anthracene	830000	U
218-01-9	Chrysene	830000	U
117-81-7	bis(2-Ethylhexyl)phthalate	830000	U
117-84-0	Di-n-Octyl phthalate	830000	U
205-99-2	Benzo(b)fluoranthene	830000	U
207-08-9	Benzo(k)fluoranthene	830000	U
50-32-8	Benzo(a)pyrene	830000	U
193-39-5	Indeno(1,2,3-cd)pyrene	830000	U
53-70-3	Dibenzo(a,h)anthracene	830000	U
191-24-2	Benzo(g,h,i)perylene	830000	U

(1) - Cannot be separated from Diphenylamine

1D
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000105

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-003

Sample wt/vol: 1.20 (g/mL) G

Lab File ID: J060712

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
126-73-8	Tributylphosphate	830000	U

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1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000106

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-003

Sample wt/vol: 1.20 (g/mL) G

Lab File ID: J060712

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

Number TICs found: 21

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOALKANE	5.33	4000000	J
2.	ETHYLMETHYLCYCLOHEXANE	5.40	9000000	J
3.	ALKANE	5.54	20000000	J
4.	ETHYLMETHYLCYCLOHEXANE	5.74	9000000	J
5.	ALKYLCYCLOHEXANE	5.98	10000000	J
6.	UNKNOWN	6.14	30000000	J
7.	ALKANE	6.28	8000000	J
8.	UNKNOWN	6.40	2000000	J
9.	ALKANE	6.51	20000000	J
10.	ALKANE	6.65	60000000	J
11.	ALKANE	6.79	20000000	J
12.	UNKNOWN	6.95	30000000	J
13.	ALKANE	7.08	40000000	J
14.	ALKANE	7.32	70000000	J
15.	ALKANE	7.68	20000000	J
16.	HYDROCARBON	7.84	10000000	J
17.	ALKYLCYCLOHEXANE	7.93	20000000	J
18.	C4 BENZENE	8.23	8000000	J
19.	ALKANE	8.35	8000000	J
20.	DECAHYDRONAPHTHALENE	8.41	8000000	J
21.	ALKANE	8.94	9000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000136

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-004

Sample wt/vol: 1.30 (g/mL) G Lab File ID: J060715

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	770000	U
111-44-4	bis(2-Chloroethyl)ether	770000	U
95-57-8	2-Chlorophenol	770000	U
541-73-1	1,3-Dichlorobenzene	770000	U
106-46-7	1,4-Dichlorobenzene	770000	U
100-51-6	Benzyl alcohol	770000	U
95-50-1	1,2-Dichlorobenzene	770000	U
95-48-7	2-Methylphenol	770000	U
108-60-1	bis(2-Chloroisopropyl)ether	770000	U
106-44-5	4-Methylphenol	770000	U
621-64-7	N-Nitroso-Di-n-propylamine	770000	U
67-72-1	Hexachloroethane	770000	U
98-95-3	Nitrobenzene	770000	U
78-59-1	Isophorone	770000	U
88-75-5	2-Nitrophenol	770000	U
105-67-9	2,4-Dimethylphenol	770000	U
65-85-0	Benzoic acid	3800000	U
111-91-1	bis(2-Chloroethoxy)methane	770000	U
120-83-2	2,4-Dichlorophenol	770000	U
120-82-1	1,2,4-Trichlorobenzene	770000	U
91-20-3	Naphthalene	770000	U
106-47-8	4-Chloroaniline	770000	U
87-68-3	Hexachlorobutadiene	770000	U
59-50-7	4-Chloro-3-methylphenol	770000	U
91-57-6	2-Methylnaphthalene	770000	U
77-47-4	Hexachlorocyclopentadiene	770000	U
88-06-2	2,4,6-Trichlorophenol	770000	U
95-95-4	2,4,5-Trichlorophenol	3800000	U
91-58-7	2-Chloronaphthalene	770000	U
88-74-4	2-Nitroaniline	3800000	U
131-11-3	Dimethylphthalate	770000	U
208-96-8	Acenaphthylene	770000	U
606-20-2	2,6-Dinitrotoluene	770000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000137

CLIENT SAMPLE NO.

B00V50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 1.30 (g/mL) G

Lab File ID: J060715

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	3800000	U
83-32-9	Acenaphthene	770000	U
51-28-5	2,4-Dinitrophenol	3800000	U
100-02-7	4-Nitrophenol	3800000	U
132-64-9	Dibenzofuran	770000	U
121-14-2	2,4-Dinitrotoluene	770000	U
84-66-2	Diethylphthalate	770000	U
7005-72-3	4-Chlorophenyl-phenylether	770000	U
86-73-7	Fluorene	770000	U
100-01-6	4-Nitroaniline	3800000	U
534-52-1	4,6-Dinitro-2-methylphenol	3800000	U
86-30-6	N-Nitrosodiphenylamine (1)	770000	U
101-55-3	4-Bromophenyl-phenylether	770000	U
118-74-1	Hexachlorobenzene	770000	U
87-86-5	Pentachlorophenol	3800000	U
85-01-8	Phenanthrene	770000	U
120-12-7	Anthracene	770000	U
84-74-2	Di-n-Butylphthalate	770000	U
206-44-0	Fluoranthene	770000	U
129-00-0	Pyrene	770000	U
85-68-7	Butylbenzylphthalate	770000	U
91-94-1	3,3'-Dichlorobenzidine	1500000	U
56-55-3	Benzo(a)anthracene	770000	U
218-01-9	Chrysene	770000	U
117-81-7	bis(2-Ethylhexyl)phthalate	770000	U
117-84-0	Di-n-Octyl phthalate	770000	U
205-99-2	Benzo(b)fluoranthene	770000	U
207-08-9	Benzo(k)fluoranthene	770000	U
50-32-8	Benzo(a)pyrene	770000	U
193-39-5	Indeno(1,2,3-cd)pyrene	770000	U
53-70-3	Dibenzo(a,h)anthracene	770000	U
191-24-2	Benzo(g,h,i)perylene	770000	U

(1) - Cannot be separated from Diphenylamine

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1D

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000138

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 1.30 (g/mL) G

Lab File ID: J060715

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

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CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
126-73-8	Tributylphosphate	770000	U

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1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

0000139

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 1.30 (g/mL) G

Lab File ID: J060715

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

Number TICs found: 21

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	5.55	4000000	J
2.	CYCLOALKANE	5.98	2000000	J
3.	ALKENE	6.14	6000000	J
4.	PROPYLHEPTANE	6.28	3000000	J
5.	ALKANE	6.51	2000000	J
6.	UNKNOWN	6.66	7000000	J
7.	CYCLOALKANE	6.90	3000000	J
8.	UNKNOWN	6.95	2000000	J
9.	CYCLOALKANE	7.08	3000000	J
10.	CYCLOALKANE	7.13	2000000	J
11.	ALKANE	7.31	9000000	J
12.	ALKANE	7.68	3000000	J
13.	ALKYLCYCLOHEXANE	7.93	3000000	J
14.	C4 BENZENE	8.25	2000000	J
15.	ALKANE	8.97	5000000	J
16.	ALKANE	10.60	9000000	J
17.	ALKANE	10.79	2000000	J
18.	ALKANE	11.69	10000000	J
19.	ALKANE	12.12	30000000	J
20.	ALKYLCYCLOHEXANE	12.84	6000000	J
21.	ALKANE	13.54	20000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000169

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-005

Sample wt/vol: 1.10 (g/mL) G Lab File ID: J060713

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	910000	U
111-44-4	bis(2-Chloroethyl)ether	910000	U
95-57-8	2-Chlorophenol	910000	U
541-73-1	1,3-Dichlorobenzene	910000	U
106-46-7	1,4-Dichlorobenzene	910000	U
100-51-6	Benzyl alcohol	910000	U
95-50-1	1,2-Dichlorobenzene	910000	U
95-48-7	2-Methylphenol	910000	U
108-60-1	bis(2-Chloroisopropyl)ether	910000	U
106-44-5	4-Methylphenol	910000	U
621-64-7	N-Nitroso-Di-n-propylamine	910000	U
67-72-1	Hexachloroethane	910000	U
98-95-3	Nitrobenzene	910000	U
78-59-1	Isophorone	910000	U
88-75-5	2-Nitrophenol	910000	U
105-67-9	2,4-Dimethylphenol	910000	U
65-85-0	Benzoic acid	4500000	U
111-91-1	bis(2-Chloroethoxy)methane	910000	U
120-83-2	2,4-Dichlorophenol	910000	U
120-82-1	1,2,4-Trichlorobenzene	910000	U
91-20-3	Naphthalene	110000	J
106-47-8	4-Chloroaniline	910000	U
87-68-3	Hexachlorobutadiene	910000	U
59-50-7	4-Chloro-3-methylphenol	910000	U
91-57-6	2-Methylnaphthalene	910000	U
77-47-4	Hexachlorocyclopentadiene	910000	U
88-06-2	2,4,6-Trichlorophenol	910000	U
95-95-4	2,4,5-Trichlorophenol	4500000	U
91-58-7	2-Chloronaphthalene	910000	U
88-74-4	2-Nitroaniline	4500000	U
131-11-3	Dimethylphthalate	910000	U
208-96-8	Acenaphthylene	910000	U
606-20-2	2,6-Dinitrotoluene	910000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000170

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-005

Sample wt/vol: 1.10 (g/mL) G Lab File ID: J060713

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	4500000	U
83-32-9	Acenaphthene	910000	U
51-28-5	2,4-Dinitrophenol	4500000	U
100-02-7	4-Nitrophenol	4500000	U
132-64-9	Dibenzofuran	910000	U
121-14-2	2,4-Dinitrotoluene	910000	U
84-66-2	Diethylphthalate	910000	U
7005-72-3	4-Chlorophenyl-phenylether	910000	U
86-73-7	Fluorene	910000	U
100-01-6	4-Nitroaniline	4500000	U
534-52-1	4,6-Dinitro-2-methylphenol	4500000	U
86-30-6	N-Nitrosodiphenylamine (1)	910000	U
101-55-3	4-Bromophenyl-phenylether	910000	U
118-74-1	Hexachlorobenzene	910000	U
87-86-5	Pentachlorophenol	4500000	U
85-01-8	Phenanthrene	910000	U
120-12-7	Anthracene	910000	U
84-74-2	Di-n-Butylphthalate	910000	U
206-44-0	Fluoranthene	910000	U
129-00-0	Pyrene	910000	U
85-68-7	Butylbenzylphthalate	910000	U
91-94-1	3,3'-Dichlorobenzidine	1800000	U
56-55-3	Benzo(a)anthracene	910000	U
218-01-9	Chrysene	910000	U
117-81-7	bis(2-Ethylhexyl)phthalate	910000	U
117-84-0	Di-n-Octyl phthalate	910000	U
205-99-2	Benzo(b)fluoranthene	910000	U
207-08-9	Benzo(k)fluoranthene	910000	U
50-32-8	Benzo(a)pyrene	910000	U
193-39-5	Indeno(1,2,3-cd)pyrene	910000	U
53-70-3	Dibenzo(a,h)anthracene	910000	U
191-24-2	Benzo(g,h,i)perylene	910000	U

(1) - Cannot be separated from Diphenylamine

1D
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000171

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005

Sample wt/vol: 1.10 (g/mL) G

Lab File ID: J060713

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
126-73-8	Tributylphosphate		E

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1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000172

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005

Sample wt/vol: 1.10 (g/mL) G

Lab File ID: J060713

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

Number TICs found: 21

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	TRIMETHYLCYCLOHEXANE	5.19	600000	J
2.	CYCLOALKANE	5.33	3000000	J
3.	ALKANE	5.54	4000000	J
4.	CYCLOALKANE	5.60	1000000	J
5.	ETHYLMETHYLCYCLOHEXANE	5.74	2000000	J
6.	CYCLOALKANE	5.98	3000000	J
7.	UNKNOWN	6.13	8000000	J
8.	ALKANE	6.27	4000000	J
9.	CYCLOALKANE	6.47	2000000	J
10.	UNKNOWN	6.64	8000000	J
11.	UNKNOWN	6.81	3000000	J
12.	CYCLOALKANE	6.89	2000000	J
13.	UNKNOWN	6.94	2000000	J
14.	UNKNOWN	7.07	5000000	J
15.	ALKANE	7.28	8000000	J
16.	ALKANE	7.66	4000000	J
17.	TRIMETHYLBENZENE	7.79	3000000	J
18.	ALKANE	7.94	3000000	J
19.	C4 BENZENE	8.23	3000000	J
20.	DECAHYDRONAPHTHALENE	8.40	2000000	J
21.	ALKANE	8.94	2000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000206

CLIENT SAMPLE NO.

BOOV51DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005 DL

Sample wt/vol: 1.10 (g/mL) G

Lab File ID: J060714

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 1000

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

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000207

CLIENT SAMPLE NO.

BOOV51DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-005 DL

Sample wt/vol: 1.10 (g/mL) G Lab File ID: J060714

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1000

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

(1) - Cannot be separated from Diphenylamine

1D
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000208

CLIENT SAMPLE NO.

BOOV51DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005 DL

Sample wt/vol: 1.10 (g/mL) G

Lab File ID: J060714

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 1000

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

CAS NO.	COMPOUND		
126-73-8	Tributylphosphate	0.23E+08	

FORM 1 SV-3 12/88 Rev.

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD SAMPLES RECEIVED: 04-26-91
RFW #: 9104L402, PCB
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of five (5) drum liquid samples collected on 04-24-91.

The samples were extracted on 04-29-91 and 05-06-91 and analyzed according to criteria set forth in the Contract Laboratory Program for PCB target compounds on 05-29,30,31-91.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analysis:

1. Linearity and breakdown criteria were met for all compounds except Aldrin on the primary column. Re-analysis was not performed since quantitation of this compound was not required.

2. Continuing calibration criteria were met on the primary column for all compounds in standards analyzed prior to sample extracts.

3. Retention time criteria were exceeded for several compounds. The data should not be affected since PCB compounds are identified by multi-peak pattern recognition.

4. All surrogate recoveries were within EPA QC limits.

5. All matrix spike recoveries were within EPA QC limits.

6. All blank spike recoveries were within EPA QC limits.

Linda A Hawkins 6.10.91

Jack R. Tuschall, Ph.D. Date
Laboratory Manager
Lionville Analytical Laboratory

Roy F. Weston, Inc. - Lionville Laboratory
PCBs by GC

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 06/03/91 11:11 Page: 1

	Cust ID:	BOOJ39	BOOJ39	BOOJ39	BOOV48	BOOV49	BOOV50
Sample Information	RFW#:	001	001 MS	001 MSD	002	003	004
	Matrix:	DRUM	DRUM	DRUM	DRUM	DRUM	DRUM
	D.F.:	0.500	0.500	0.500	0.500	0.500	0.500
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate: Di-n-butylchlorendate		76 %	79 %	79 %	85 %	85 %	85 %
Aroclor-1016		12000 U	12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1221		12000 U	12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1232		12000 U	12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1242		12000 U	12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1248		12000 U	12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1254		24000 U	74 %	77 %	24000 U	24000 U	24000 U
Aroclor-1260		24000 U	24000 U	24000 U	24000 U	24000 U	24000 U

	Cust ID:	BOOV51	PBLK	PBLK BS	PBLK	PBLK BS
Sample Information	RFW#:	005	91LE0584-MB1	91LE0584-MB1	91LE0559-MB1	91LE0559-MB1
	Matrix:	DRUM	SOIL	SOIL	SOIL	SOIL
	D.F.:	0.500	0.500	0.500	0.500	0.500
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate: Di-n-butylchlorendate		87 %	78 %	74 %	83 %	83 %
Aroclor-1016		12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1221		12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1232		12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1242		12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1248		12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1254		24000 U	24000 U	75 %	24000 U	79 %
Aroclor-1260		24000 U	24000 U	24000 U	24000 U	24000 U

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not requested. NS= Not spiked.
%= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of EPA CLP QC

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0000015

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 0.100 (g/mL) G

Lab File ID: 05299103.49

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 100 dec.

Date Extracted: 05/06/91

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 05/30/91

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

Dilution Factor: 0.500

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

CAS NO.	COMPOUND		
12674-11-2	Aroclor-1016	12000	U
11104-28-2	Aroclor-1221	12000	U
11141-16-5	Aroclor-1232	12000	U
53469-21-9	Aroclor-1242	12000	U
12672-29-6	Aroclor-1248	12000	U
11097-69-1	Aroclor-1254	24000	U
11096-82-5	Aroclor-1260	24000	U

DEL 6/4/91

FORM 1 PEST 12/88 Rev.

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0000018

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-002

Sample wt/vol: 0.100 (g/mL) G

Lab File ID: 05289109.28

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 100 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 05/29/91

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

Dilution Factor: 0.500

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
12674-11-2	Aroclor-1016	12000	U
11104-28-2	Aroclor-1221	12000	U
11141-16-5	Aroclor-1232	12000	U
53469-21-9	Aroclor-1242	12000	U
12672-29-6	Aroclor-1248	12000	U
11097-69-1	Aroclor-1254	24000	U
11096-82-5	Aroclor-1260	24000	U

DEL 6/4/91

FORM 1 PEST 12/88 Rev.

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0000021

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-003

Sample wt/vol: 0.100 (g/mL) G

Lab File ID: 05289109.29

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 100 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 05/29/91

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

Dilution Factor: 0.500

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

CAS NO.	COMPOUND		
12674-11-2	Aroclor-1016	12000	U
11104-28-2	Aroclor-1221	12000	U
11141-16-5	Aroclor-1232	12000	U
53469-21-9	Aroclor-1242	12000	U
12672-29-6	Aroclor-1248	12000	U
11097-69-1	Aroclor-1254	24000	U
11096-82-5	Aroclor-1260	24000	U

DEC 6/4/91

FORM 1 PEST 12/88 Rev.

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0000024

CLIENT SAMPLE NO.

B00V50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 0.100 (g/mL) G

Lab File ID: 05289109.30

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 100 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 05/29/91

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

Dilution Factor: 0.500

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
12674-11-2	Aroclor-1016	12000	U
11104-28-2	Aroclor-1221	12000	U
11141-16-5	Aroclor-1232	12000	U
53469-21-9	Aroclor-1242	12000	U
12672-29-6	Aroclor-1248	12000	U
11097-69-1	Aroclor-1254	24000	U
11096-82-5	Aroclor-1260	24000	U

DEL 6/4/91

FORM 1 PEST 12/88 Rev.

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0000027

CLIENT SAMPLE NO.

B00V51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005

Sample wt/vol: 0.100 (g/mL) G

Lab File ID: 05289109.31

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 100 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 05/29/91

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

Dilution Factor: 0.500

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

CAS NO.	COMPOUND		
12674-11-2	Aroclor-1016	12000	U
11104-28-2	Aroclor-1221	12000	U
11141-16-5	Aroclor-1232	12000	U
53469-21-9	Aroclor-1242	12000	U
12672-29-6	Aroclor-1248	12000	U
11097-69-1	Aroclor-1254	24000	U
11096-82-5	Aroclor-1260	24000	U

DEL 6/4/91

FORM 1 PEST 12/88 Rev.

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 04-26-91
RFW #: 9104L402
W.O. #: 6168-02-01

INORGANIC NARRATIVE

The following is a summary of the quality control results and a description of any problems encountered during the analysis of this batch of samples:

1. All sample holding times as required by 40CFR136 were met for water samples.

2. All preparation blanks were analyzed below the required detection limit.

3. All calibration verification checks were within the required control limits of 90-110%. Calibration verification is performed using independent standards.

4. Matrix spike recoveries are summarized on the Inorganics Accuracy Report contained within this document. All recoveries were within the 75-125% guidance limit. All %RPD were within the 20% guidance limit.

5. Replicate results are summarized on the Inorganic Precision report contained within this document. All results were within the 20% RPD guidance limit.

6. The analytical methods applied by the laboratory, unless otherwise requested, for all inorganic analyses are derived from the USEPA Method for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020), and Standard Methods for the Examination of Water and Wastewater 16 ed. Methods for the analysis of solid samples are derived from Test Methods for Evaluating Solid Waste (USEPA SW846).

Jack R. Tuschall, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

5-8-9
Date

JUN 1991
RECEIVED
DATA RECEIPT

pas.21\i4-186

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/24/91

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9104L402

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOOJ39	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	97.8	DEG/F	20.0
-002	BOOV48	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	97.7	DEG/F	20.0
-003	BOOV49	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	93.8	DEG/F	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/24/91

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9104L402

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-004	BOOV50	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	108	DEG/F	20.0
-005	BOOV51	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	104	DEG/F	20.0

WESTON

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE SAMPLES RECEIVED: 04/26/91
RFW #: 9104L402 GC SCAN (HYDROCARBON FINGERPRINT)
W.O. #: 6168-02-01-0000

NARRATIVE

This set of samples consisted of five drum liquid samples collected on April 24, 1991.

The liquids were diluted to the proper analytical range and then analyzed by Direct Injection - GC/FID for Hydrocarbons, and MIBK (Methyl iso-Butyl Ketone) on April 29, 30, 1991. Dilutions of the liquids were made by adding 100 ul sample to 9.9 ml CS2 (carbon disulfide) to yield a 1:100 dilution. Then 100 ul of the 1:100 dilution was added to 4.9 ml CS2 to yield a 1:5000 dilution which was used in the analysis.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analysis:

1. An SP5-30M .53mm ID GC capillary column was utilized in these analyses. The initial temperature was 35 C, which was held for 5 minutes. The temperature was then ramped at a rate of 8 C/minute to a final temperature of 300 C, where it was held for 16 minutes. The injection volume was 5 ul.

2. Results for hydrocarbons were obtained by External Standard Quantification Method using the average calibration factor from the initial calibration.

3. The method blank was free of contamination.

4. All continuing calibration recoveries were within laboratory control limits. Due to the almost pure organic nature of the samples, four continuing calibrations were analyzed in place of blank spikes or matrix spikes.

Steph D Weston 5-31-91
J. Michael Taylor Date
Project Director
Lionville Analytical Laboratory
WEST402.CN

Roy F. Weston, Inc.- Lionville Laboratory

Hydrocarbon Fingerprinting

Client :Westinghouse
RFW# :9104L402-001
Client ID :B00J39
Matrix :Drum Liquid
Run Batch :91DGC342
Init. Cal.:04/02-03/91

Sample Collected:04/24/91
Sample Received :04/26/91
Sample Prepared :04/29/91
Sample Analyzed :04/30/91

Qualitative Identification

The fingerprint is tentatively identified as mineral spirits. There was also a peak in the C16 to C18 range.

Degree of Matching = Good

Quantitative Report

Total Hydrocarbons = .84 G/ML

Approximate measured density (sample) = .78 G/ML

Measured density of Mineral Spirits = .81 G/ML

Sample quantified versus = Kerosene

Roy F. Weston, Inc.- Lionville Laboratory

Hydrocarbon Fingerprinting

Client :Westinghouse
RFW# :9104L402-002
Client ID :BOOJ48
Matrix :Drum Liquid
Run Batch :91DGC342
Init. Cal.:04/02-03/91

Sample Collected:04/24/91
Sample Received :04/26/91
Sample Prepared :04/29/91
Sample Analyzed :04/30/91

Qualitative Identification

The fingerprint is tentatively identified as mineral spirits.

Degree of Matching = Good

Quantitative Report

Total Hydrocarbons = .80 G/ML

Approximate measured density (sample) = .76 G/ML

Measured density of Mineral Spirits = .81 G/ML

Sample quantified versus = Kerosene

Roy F. Weston, Inc.- Lionville Laboratory

Hydrocarbon Fingerprinting

Client :Westinghouse
RFW# :9104L402-003
Client ID :BOOV49
Matrix :Drum Liquid
Run Batch :91DGC342
Init. Cal.:04/02-03/91

Sample Collected:04/24/91
Sample Received :04/26/91
Sample Prepared :04/29/91
Sample Analyzed :04/30/91

Qualitative Identification

The fingerprint is tentatively identified as mineral spirits.

Degree of Matching = Good

Quantitative Report

Total Hydrocarbons = .97 G/ML

Approximate measured density (sample) = .78 G/ML

Measured density of Mineral Spirits = .81 G/ML

Sample quantified versus = Kerosene

Roy F. Weston, Inc.- Lionville Laboratory

Hydrocarbon Fingerprinting

Client :Westinghouse
RFW# :9104L402-004
Client ID :B00V50
Matrix :Drum Liquid
Run Batch :91DGC342
Init. Cal.:04/02-03/91

Sample Collected:04/24/91
Sample Received :04/26/91
Sample Prepared :04/29/91
Sample Analyzed :04/30/91

Qualitative Identification

The fingerprint is tentatively identified as mineral spirits. It also appears that there is diesel fuel present in the sample.

Degree of Matching = Good

Quantitative Report

Total Hydrocarbons = .85 G/ML

Approximate measured density (sample) = .78 G/ML

Measured density of Mineral Spirits = .81 G/ML

Sample quantified versus = Kerosene

Roy F. Weston, Inc.- Lionville Laboratory

Hydrocarbon Fingerprinting

Client :Westinghouse
RFW# :9104L402-005
Client ID :BOOV51
Matrix :Drum Liquid
Run Batch :91DGC342
Init. Cal.:04/02-03/91

Sample Collected:04/24/91
Sample Received :04/26/91
Sample Prepared :04/29/91
Sample Analyzed :04/30/91

Qualitative Identification

The fingerprint is tentatively identified as mineral spirits. There was also a peak in the C16 to C18 range.

Degree of Matching = Good

Quantitative Report

Total Hydrocarbons = 1.0 G/ML

Approximate measured density (sample) = .78 G/ML

Measured density of Mineral Spirits = .81 G/ML

Sample quantified versus = Kerosene

9104L402-WOS-508

Westinghouse Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 7-31-91

REVIEWED BY CJ Smith

LABORATORY Roy F. Weston

CASE #

SDG # 9104L402

SAMPLES/MATRIX B00J39 - drum organic
B00V48 liquids
B00V49
B00V50
B00V51

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Anions	N/A	N/A
1. Requested vs. Reported		O		
2. Holding Time		O		
3. matrix spike		O		
4. Duplicate Analysis		O		
5. Analytical Blank		O		
6. Calibration		X		
7. LCS		X		
8.				
9.				
10.				

O = data had no problems
X = data qualified due to minor problems
M = data qualified due to major problems/some data may be unusable

OVERALL ASSESSSMENT: fair - no calibration on LCS data provided with dat package.

NOTES:

o Refer to the corresponding attachments for explanation of any problems.

34 /930 046

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/24/91

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9104L402

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOOJ39	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	97.8	DEG/F	20.0
-002	BOOV48	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	97.7	DEG/F	20.0
-003	BOOV49	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	93.8	DEG/F	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/24/91

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9104L402

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-004	BOOV50	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	108	DEG/F	20.0
-005	BOOV51	Chloride by IC	0.50 u	mg/L	0.50
		Fluoride by IC	2.0 u	mg/L	2.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	0.50 u	mg/L	0.50
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	0.50 u	mg/L	0.50
		Flash Point	104	DEG/F	20.0

RCRA LEVEL C QC

Name C.J. Simiele Date 7-31-91

QC Check: Requested vs. Reported Analysis

COMMENTS: Requested Analysis: Anions
Reported Analysis: Anions

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

___ of ___

RCRA LEVEL C QC

Name CJ Simiele Date 7-31-91

QC Check: Holding Time

COMMENTS: Analysis performed 16 days after sampling.

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

___ of ___

RCRA LEVEL C QC

Name CJ Simuel Date 7-31-91

QC Check: Matrix Spike

COMMENTS: Matrix spike % recoveries are all with in required control limits

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

___ of ___

RCRA LEVEL C QC

Name CJ Simiele Date 7-31-91

QC Check: Duplicate Analysis

COMMENTS: Duplicate analysis RPD's are all within required control limits

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

___ of ___

RCRA LEVEL C QC

Name CJ Simiele Date 7-31-91

QC Check: Analytical Blank

COMMENTS: No contaminants detected in blank

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

___ of ___

RCRA LEVEL C QC

Name CJ Simuele Date 7-31-91

QC Check: Calibration

COMMENTS: No calibration data provided with data package.

ACTION: None-user should be aware, unable to evaluate data based on calibration results.

sample #	constituent	value/qual	sample #	constituent	value/qual

___ of ___

RCRA LEVEL C QC

Name CU Simuele Date 7-31-91

QC Check: LCS

COMMENTS: No LCS results provided with data package.

ACTION: None, user should be aware, unable to evaluate data based on LCS results

sample #	constituent	value/qual	sample #	constituent	value/qual

___ of ___

Original located with RFW 9104L227

Westinghouse Hanford Company

OSM INORGANIC DATA ASSESSMENT

DATE 7-25-91

REVIEWED BY M. A Beck

LABORATORY Roy F. Weston

CASE # West

SDG # CLP 227

RFW # 9104L227 / 9104L382
9104L268 / 9104L326 / 9104L402

SAMPLES/MATRIX (as sampled)
B00J10 B00J16 B00V46 B00V39
B00J13 B00J18 B00V47 B00V51
B00J14 B00J19 B00V48 B00J07 (drum organic liquids)
B00J12 B00V07 B00V49
B00J15 B00V45 B00V50

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN
1. Calibrations (Form II)	O			
2. Blanks (III)	X			
3. ICS (IV)	X			
4. Matrix Spike (V)	X			
5. Duplicate Analysis (VI)	O			
6. LCS (VII)	O			
7. Serial Dilution (IX)	X			
8. GFAA				
9. Holding Times (XIV)	O			
10. Other QC	N/A			

O = data had no problems
X = data qualified due to minor problems
M = data qualified due to major problems/some data may be unusable

OVERALL ASSESSSMENT: fair - minor QC problems with data provided

NOTES:

o Refer to the corresponding attachments for explanation of any problems.

U.S. EPA - CLP 0000014

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ10

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104227001

Level (low/med): LOW Date Received:04/10/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	130	~~B~~	~~N~~ ~~4~~ ok mg/B	P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00		N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	310	~~B~~	4	P
7440-47-3	Chromium	3.00	U	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	36.1		N	P
7439-89-6	Iron	212		N	P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.50	~~B~~	~~N~~ J	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	404	~~B~~	4	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	171		~~*E~~ ~~J4~~	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

M.A.B. 7/25/91

FORM I - IN

0000015

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ16

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104227003

Level (low/med): LOW Date Received:04/10/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U	N	P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	353	~~B~~ U		P
7440-47-3	Chromium	4.20	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	11.6	B	N	P
7439-89-6	Iron	94.0	B	N	P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U	N	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	243	~~B~~ U		P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	45.4		~~*B~~ UJ	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mgB.
7/25/91

FORM I - IN

0000016

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ18

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104227005

Level (low/med): LOW Date Received:04/10/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	125	B	N	P
7440-36-0	Antimony	20.1	B	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	328	~~B~~	U	P
7440-47-3	Chromium	3.70	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	44.3		N	P
7439-89-6	Iron	166		N	P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.50	~~B~~	~~N~~ J	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	223	~~B~~	U	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	115		~~*B~~ UJ	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mAB
7/25/91

FORM I - IN

0000017

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ12

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104268001

Level (low/med): LOW Date Received:04/12/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	199	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	282	~~B~~	U	P
7440-47-3	Chromium	3.40	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	7.30	B	N	P
7439-89-6	Iron	156			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U	N	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	132	~~B~~	UJ	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	69.0		~~B~~ UJ	P
	Cyanide				C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MJB 7/25/91

FORM I - IN

U000018

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ13

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104268002

Level (low/med): LOW Date Received:04/12/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	136	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	322	~~B~~	U	P
7440-47-3	Chromium	3.00	U	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	12.1	B	N	P
7439-89-6	Iron	286			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	3.10	~~B~~	N J	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1690	~~B~~	U	P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	183	~~B~~	U J	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	48.9		~~*B~~ U J	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

mab 7/25/91

0000019

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ14

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104268003

Level (low/med): LOW Date Received:04/12/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	127	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	350	~~B~~	4	P
7440-47-3	Chromium	3.00	U	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	11.2	B	N	P
7439-89-6	Iron	216			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	~~N~~	J	P
7439-97-6	Mercury				
7440-02-0	Nickel	13.2	B	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	356	~~B~~	4	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	53.7	~~*~~	E J	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

MAB. 7/25/91

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ19

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104268005

Level (low/med): LOW Date Received:04/12/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	408	~~B~~ U		P
7440-47-3	Chromium	4.40	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	25.9		N	P
7439-89-6	Iron	834			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	94.0	~~N~~ J		P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	380	~~B~~ U		P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	93.0	~~*B~~ W		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MAB 7/25/91

0000022

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00J46

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104326001

Level (low/med): LOW Date Received:04/18/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	95.8	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	480	~~B~~	4	P
7440-47-3	Chromium	4.60	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	36.5		N	P
7439-89-6	Iron	204			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	7.70	~~B~~	~~N~~ J	P
7439-97-6	Mercury				
7440-02-0	Nickel	11.4	B	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	898	~~B~~	4	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	867		~~*E~~ UJ	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

mab. 7/25/91

0000023

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ47

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104326002

Level (low/med): LOW Date Received:04/18/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	128	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	325	~~B~~	q	P
7440-47-3	Chromium	3.20	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	15.8	B	N	P
7439-89-6	Iron	3380			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	3.70	~~B~~	~~N~~ J	P
7439-97-6	Mercury				
7440-02-0	Nickel	9.90	B		P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	98.5	~~B~~	UJ	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	782		*E J	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mas 7/25/91

FORM I - IN

0000024

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00J07

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104382001

Level (low/med): LOW Date Received:04/24/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	124	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	335	~~B~~	4	P
7440-47-3	Chromium	3.00	U	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	7.60	B	N	P
7439-89-6	Iron	2680			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	20.0	~~N~~	J	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	335	~~B~~	4	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	30.6		*E UJ	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mas 7/25/91

FORM I - IN

0000025

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

DB00J45

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104382002

Level (low/med): LOW Date Received:04/24/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	575			P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	368	~~B~~	cy	P
7440-47-3	Chromium	18.0		N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	7.80	B	N	P
7439-89-6	Iron	404			P
7439-92-1	Lead				
7439-95-4	Magnesium	1300	B		P
7439-96-5	Manganese	4.20	~~B~~	~~N~~	P
7439-97-6	Mercury				
7440-02-0	Nickel	8.30	B	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	347	~~B~~	cy	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	43.8		*E J	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

MAB 7/25/91

0000026

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ39

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104402001

Level (low/med): LOW Date Received:04/26/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	87.3	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	242	~~B~~	4	P
7440-47-3	Chromium	3.00	U	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	7.00	U	N	P
7439-89-6	Iron	146			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U	N	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	78.5	~~B~~	4J	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	51.2		*E J	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

m.a.B.
7/25/91

FORM I - IN

0000027

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOV48

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104402002

Level (low/med): LOW Date Received:04/26/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	83.5	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	290	~~B~~	4	P
7440-47-3	Chromium	6.00	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	7.80	B	N	P
7439-89-6	Iron	169			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U	N	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	136	~~B~~	4 J	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	38.8		*E J	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mgb
7/25/91

FORM I - IN

0000028

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOV49

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104402003

Level (low/med): LOW Date Received:04/26/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	118	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	339	~~B~~	4	P
7440-47-3	Chromium	3.40	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	7.30	B	N	P
7439-89-6	Iron	197			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	3.00	~~B~~	~~N~~ J	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1100	~~B~~	4	P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	1130	~~B~~	4	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	49.1		*E J	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

mab. 7/25/91

0000029

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOV50

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104402004

Level (low/med): LOW Date Received:04/26/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	109	B		P
7440-36-0	Antimony	29.0	B	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	293	~~B~~	11	P
7440-47-3	Chromium	3.60	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	7.30	B	N	P
7439-89-6	Iron	131			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U	N	P
7439-97-6	Mercury				
7440-02-0	Nickel	7.00	U	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	73.5	~~B~~	47	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	126		*E J	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

m.a.b.
7/25/91

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOV51

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104402005

Level (low/med): LOW Date Received:04/26/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	87.3	B		P
7440-36-0	Antimony	19.0	U	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	308	~~B~~	G	P
7440-47-3	Chromium	5.90	B	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	10.8	B	N	P
7439-89-6	Iron	123			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.20	~~B~~	~~N~~ J	P
7439-97-6	Mercury				
7440-02-0	Nickel	25.7	B	N	P
7440-09-7	Potassium	1050	~~B~~	U	P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	442	~~B~~	G	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	41.3		*E J	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MAB 7/25/91

FORM I - IN

INORGANIC QC - Calibrations

Name Mark A. Beck MAB Date 7/25/91

COMMENTS: No Run log found, raw data indicates that all standards were run at appropriate times. Mg, CN not analyzed for, no standards needed. Initial, Continuing calibration recovery within limits.

ACTION: none

sample #	constituent	value/qual	sample #	constituent	value/qual

INORGANIC QC - Calibrations

Name MA Beck Date 7-25-91

COMMENTS: Contaminants detected in preparation blank for Ca, Mg, K, Na and Zn.

ACTION: Qualify all assouated samples as per QSM guidelines

sample #	constituent	value/qual
300J07	Zn	u
300J13	K	u
B00V49	K	u
B00V51	K	u
u 18 samples	Ca	u
	Zn	u

sample #	constituent	value/qual

INORGANIC QC - ICS

Name MARK A. BECK MAB. Date 7/25/91

COMMENTS: ICS done before and after analysis runs, as per CLP protocol. All recoveries within limits. Mn, K had positive amounts in ICS samples, despite the fact that they ~~sol soho~~ should not be present. Na showed negative.

ACTION: Qualified associated results J if values near ICS values. For Na qualified results <|ICS| results as UJ

sample #	constituent	value/qual
B00J10	Mn	J
B00J18	~~Mn~~ CLS 7-28-91	
B00J13		
B00J14		
B00J19		
B00J46		
B00J47		
B00J07		
B00J45		
B00V49		
B00V51		
none	K	
	none detected, no possible false positives.	

sample #	constituent	value/qual
~~ICS~~ 7-28-91	Na	UJ
B00J12		
B00J13		
B00J47		
B00J39		
B00J48		
~~B00J5~~ CLS 7-28-91		
B00V50		

INORGANIC QC - Matrix Spike

Name MARK A. BECK MAB. Date 7/25/91

COMMENTS: All analytes except zinc out of control limits. All data (results) except zinc ≤ IDL ~~qualified~~ qualified as UJ all result > IDL qualified J

ACTION: As stated above. All results to be considered ~~esp~~ estimated. All results except Zn biased low on basis of low spike recovery.

sample #	constituent	value/qual	sample #	constituent	value/qual
all 18 samples	all except Zn	J (detects) or UJ (non-detects			

INORGANIC QC - Duplicate Analysis

Name Mark A. Beck mab Date 7/25/91

COMMENTS: Field blank not present, therefore not used (inappropriately as Duplicate sample. All results ~~samples~~ < CRDL or < 5x CRDL and either no control limit applies or the deviation is within ± CRDL for that analyte.

ACTION: none

sample #	constituent	value/qual	sample #	constituent	value/qual

INORGANIC QC - LCS

Name MARK A. BECK mgr. Date 7/25/91

COMMENTS: all ~~[illegible]~~ analyte within control limits

ACTION: none

sample #	constituent	value/qual	sample #	constituent	value/qual

INORGANIC QC - Serial Dilution

Name Mark A. Beck mab. Date 7/25/91

COMMENTS: Zn % D >10% Zn concentration for sample > 10x I.D.L. All other analytes had an original concentration <10x IDL so no control limit ~~applied~~ applied. No significant interferences seen.

ACTION: qualified Zn as below

sample #	constituent	value/qual	sample #	constituent	value/qual
all 18 samples	Zn	J			

INORGANIC QC - Holding Times

Name Mark A. Beck mam. Date 7/25/91

COMMENTS: All Holding times met. All samples preserved to ← pH < 2.

ACTION: none

sample #	constituent	value/qual	sample #	constituent	value/qual

INORGANIC QC - other

Name Mark A. Beck m.a.b. Date 7/25/91

COMMENTS: none

ACTION: none

sample #	constituent	value/qual	sample #	constituent	value/qual

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOJ15

Lab Name:Roy F. Weston, Inc. Contract:6168-02-01

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP227

Matrix (soil/water):WATER Lab Sample ID:9104268004

Level (low/med): LOW Date Received:04/12/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	295			P
7440-36-0	Antimony	42.8	B	N	P
7440-38-2	Arsenic				
7440-39-3	Barium	5.00	U	N	P
7440-41-7	Beryllium	1.00	U	N	P
7440-43-9	Cadmium	4.00	U	N	P
7440-70-2	Calcium	297	~~B~~	4	P
7440-47-3	Chromium	3.00	U	N	P
7440-48-4	Cobalt	4.00	U	N	P
7440-50-8	Copper	11.6	B	N	P
7439-89-6	Iron	195			P
7439-92-1	Lead				
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U	N	P
7439-97-6	Mercury				
7440-02-0	Nickel	15.4	B	N	P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium				
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	231	~~B~~	4	P
7440-28-0	Thallium				
7440-62-2	Vanadium	8.00	U	N	P
7440-66-6	Zinc	52.0	~~+~~	~~*E 4-7~~	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

mah
7/25/91

Westinghouse
Hanford Company

OSM ORGANIC DATA ASSESSMENT

DATE 7-31-91

REVIEWED BY CJ Simuel

LABORATORY Roy F. Weston

CASE #

SDG # 91041402

SAMPLES/MATRIX B00J39 - drum organic

B00V48 liquids

B00V49

B00V50

B00V51

DATA ASSESSMENT SUMMARY

	VOA	ABN	~~PEST~~ PCB
1. Holding Times (Form I)	O	O	X
2. Surrogate Recovery (II)	X	O	O
3. Matrix Spike/ MSD (III)	O	O	O
4. Blanks (IV)	X	O	O
5. GC/MS Tune (V)	O	O	
6. Calibration (VI-VII; VIII pest)	O	O	X
7. Internal Standards (VIII)	O	O	
8. Instr. Perform. (IX pest)			O
9. Other ( )	N/A	N/A	N/A

O = data had no problems
X = data qualified due to minor problems
M = data qualified due to major problems, some data may be unusable

OVERALL ASSESSMENT:

NOTES :

Refer to the corresponding attachments for explanation of any problems.

Cust ID:	BOOV51		VBLK		VBLK		VBLK	
RFW#:	005		91LVX069-MB1		91LVX070-MB1		91LVX071-MB1	
Level:	MED		MED		MED		MED	
Toluene	22000	J	620	U	620	U	620	U
Chlorobenzene	62000	U	620	U	620	U	620	U
Ethylbenzene	30000	J	620	U	620	U	620	U
Styrene	62000	U	620	U	620	U	620	U
Xylene (total)	630000		620	U	620	U	620	U

** Outside of EPA CLP QC limits.

0000007

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000022

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5115

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/01/91

Column: (pack/cap) CAP

Dilution Factor: 125

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	120000	U
74-83-9	Bromomethane	120000	U
75-01-4	Vinyl Chloride	120000	U
75-00-3	Chloroethane	120000	U
75-09-2	Methylene Chloride	290000	B
67-64-1	Acetone	160000	B
75-15-0	Carbon Disulfide	62000	U
75-35-4	1,1-Dichloroethene	62000	U
75-34-3	1,1-Dichloroethane	62000	U
540-59-0	1,2-Dichloroethene (total)	62000	U
67-66-3	Chloroform	62000	U
107-06-2	1,2-Dichloroethane	62000	U
78-93-3	2-Butanone	120000	U
71-55-6	1,1,1-Trichloroethane	62000	U
56-23-5	Carbon Tetrachloride	62000	U
108-05-4	Vinyl Acetate	120000	U
75-27-4	Bromodichloromethane	62000	U
78-87-5	1,2-Dichloropropane	62000	U
10061-01-5	cis-1,3-Dichloropropene	62000	U
79-01-6	Trichloroethene	62000	U
124-48-1	Dibromochloromethane	62000	U
79-00-5	1,1,2-Trichloroethane	62000	U
71-43-2	Benzene	62000	U
10061-02-6	Trans-1,3-Dichloropropene	62000	U
75-25-2	Bromoform	62000	U
108-10-1	4-Methyl-2-pentanone	120000	U
591-78-6	2-Hexanone	120000	U
127-18-4	Tetrachloroethene	62000	U
79-34-5	1,1,2,2-Tetrachloroethane	62000	U
108-88-3	Toluene	22000	J
108-90-7	Chlorobenzene	62000	U
100-41-4	Ethylbenzene	30000	J
100-42-5	Styrene	62000	U
1330-20-7	Xylene (total)	650000	

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles by GC/MS, HSL List

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 05/10/91 11:05 Page: 1a

	Cust ID:	B00J39		B00J39		B00J39		B00V48		B00V49		B00V50	
Sample Information	RFW#:	001		001 MS		001 MSD		002		003		004	
	Matrix:	DRUM		DRUM		DRUM		DRUM		DRUM		DRUM	
	D.F.:	125		125		125		250		125		62.5	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
	Level:	MED		MED		MED		MED		MED		MED	
Surrogate Recovery	Toluene-d8	D	%	D	%	D	%	D	%	D	%	D	%
	Bromofluorobenzene	D	%	D	%	D	%	D	%	D	%	D	%
	1,2-Dichloroethane-d4	D	%	D	%	D	%	D	%	D	%	D	%
			fl		fl		fl		fl		fl		fl
Chloromethane		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Bromomethane		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Vinyl Chloride		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Chloroethane		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Methylene Chloride		290000	B	140000	B	100000	B	410000	B	190000	B	43000	B
Acetone		160000	B	190000	B	83000	JB	260000	B	240000	B	74000	B
Carbon Disulfide		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,1-Dichloroethene		62000	U	138	%	131	%	120000	U	62000	U	31000	U
1,1-Dichloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,2-Dichloroethene (total)		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Chloroform		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,2-Dichloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
2-Butanone		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
1,1,1-Trichloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Carbon Tetrachloride		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Vinyl Acetate		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Bromodichloromethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,2-Dichloropropane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
cis-1,3-Dichloropropene		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Trichloroethene		62000	U	118	%	117	%	120000	U	62000	U	31000	U
Dibromochloromethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,1,2-Trichloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Benzene		62000	U	119	%	119	%	120000	U	62000	U	31000	U
Trans-1,3-Dichloropropene		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Bromoform		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
4-Methyl-2-pentanone		120000	U	120000	U	120000	U	390000		120000	U	62000	U
2-Hexanone		120000	U	120000	U	120000	U	250000	U	120000	U	62000	U
Tetrachloroethene		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
1,1,2,2-Tetrachloroethane		62000	U	62000	U	62000	U	120000	U	62000	U	31000	U

*= Outside of EPA CLP QC limits.

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000

Cust ID:	BOOJ39		BOOJ39		BOOJ39		BOOV48		BOOV49		BOOV50	
RFW#:	001		001 MS		001 MSD		002		003		004	
Level:	MED		MED		MED		MED		MED		MED	
Toluene	22000	J	132	%	139	%	140000		150000		92000	
Chlorobenzene	62000	U	110	%	115	%	120000	U	62000	U	31000	U
Ethylbenzene	30000	J	30000	J	32000	J	160000		170000		99000	
Styrene	62000	U	62000	U	62000	U	120000	U	62000	U	31000	U
Xylene (total)	650000		420000		430000		1100000		1200000		1000000	

*= Outside of EPA CLP QC limits.

000005

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles by GC/MS, HSL List

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 05/10/91 11:05 Page: 2a

	Cust ID:	BOOV51		VBLK		VBLK		VBLK									
Sample Information	RFW#:	005		91LVX069-MB1		91LVX070-MB1		91LVX071-MB1									
	Matrix:	DRUM		DRUM		SOIL		SOIL									
	D.F.:	125		1.25		1.25		1.25									
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg									
	Level:	MED		MED		MED		MED									
Surrogate Recovery	Toluene-d8	D	%	82	%	105	%	93	%								
	Bromofluorobenzene	D	%	81	%	103	%	90	%								
	1,2-Dichloroethane-d4	D	%	83	%	95	%	97	%								
Chloromethane		120000	U	1200	U	1200	U	1200	U								
Bromomethane		120000	U	1200	U	1200	U	1200	U								
Vinyl Chloride		120000	U	1200	U	1200	U	1200	U								
Chloroethane		120000	U	1200	U	1200	U	1200	U								
Methylene Chloride		150000	B	1400		1300		800									
Acetone		81000	JB	980	J	2800		1400									
Carbon Disulfide		62000	U	620	U	620	U	620	U								
1,1-Dichloroethene		62000	U	620	U	620	U	620	U								
1,1-Dichloroethane		62000	U	620	U	620	U	620	U								
1,2-Dichloroethene (total)		62000	U	620	U	620	U	620	U								
Chloroform		62000	U	620	U	620	U	620	U								
1,2-Dichloroethane		62000	U	620	U	620	U	620	U								
2-Butanone		120000	U	1200	U	1200	U	1200	U								
1,1,1-Trichloroethane		62000	U	620	U	620	U	620	U								
Carbon Tetrachloride		62000	U	620	U	620	U	620	U								
Vinyl Acetate		120000	U	1200	U	1200	U	1200	U								
Bromodichloromethane		62000	U	620	U	620	U	620	U								
1,2-Dichloropropane		62000	U	620	U	620	U	620	U								
cis-1,3-Dichloropropene		62000	U	620	U	620	U	620	U								
Trichloroethene		62000	U	620	U	620	U	620	U								
Dibromochloromethane		62000	U	620	U	620	U	620	U								
1,1,2-Trichloroethane		62000	U	620	U	620	U	620	U								
Benzene		62000	U	620	U	620	U	620	U								
Trans-1,3-Dichloropropene		62000	U	620	U	620	U	620	U								
Bromoform		62000	U	620	U	620	U	620	U								
4-Methyl-2-pentanone		120000	U	1200	U	1200	U	1200	U								
2-Hexanone		120000	U	1200	U	1200	U	1200	U								
Tetrachloroethene		62000	U	620	U	620	U	620	U								
1,1,2,2-Tetrachloroethane		62000	U	620	U	620	U	620	U								

*= Outside of EPA CLP QC limits.

1E

VOLATILE ORGANICS ANALYSIS SHEET

TENTATIVELY IDENTIFIED COMPOUNDS 0000023

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-C1-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5115

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/01/91

Column: (pack/cap) CAP

Dilution Factor: 125

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	19.34	1000000	J
2.	HYDROCARBON	19.97	900000	J
3.	HYDROCARBON	20.30	2000000	J
4.	PROPYL BENZENE	20.83	2000000	J
5.	C3 BENZENE	21.10	1000000	J
6.	C3 BENZENE	21.78	1000000	J
7.	C3 BENZENE	22.25	2000000	J
8.	C3 BENZENE	23.28	3000000	J
9.	C4 BENZENE	24.08	1000000	J
10.	UNKNOWN	24.26	1000000	J

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000044

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-002

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5606

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/06/91

Column: (pack/cap) PACK

Dilution Factor: 250

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	250000	U
74-83-9	Bromomethane	250000	U
75-01-4	Vinyl Chloride	250000	U
75-00-3	Chloroethane	250000	U
75-09-2	Methylene Chloride	410000	B
67-64-1	Acetone	260000	B
75-15-0	Carbon Disulfide	120000	U
75-35-4	1,1-Dichloroethene	120000	U
75-34-3	1,1-Dichloroethane	120000	U
540-59-0	1,2-Dichloroethene (total)	120000	U
67-66-3	Chloroform	120000	U
107-06-2	1,2-Dichloroethane	120000	U
78-93-3	2-Butanone	250000	U
71-55-6	1,1,1-Trichloroethane	120000	U
56-23-5	Carbon Tetrachloride	120000	U
108-05-4	Vinyl Acetate	250000	U
75-27-4	Bromodichloromethane	120000	U
78-87-5	1,2-Dichloropropane	120000	U
10061-01-5	cis-1,3-Dichloropropene	120000	U
79-01-6	Trichloroethene	120000	U
124-48-1	Dibromochloromethane	120000	U
79-00-5	1,1,2-Trichloroethane	120000	U
71-43-2	Benzene	120000	U
10061-02-6	Trans-1,3-Dichloropropene	120000	U
75-25-2	Bromoform	120000	U
108-10-1	4-Methyl-2-pentanone	390000	
591-78-6	2-Hexanone	250000	U
127-18-4	Tetrachloroethene	120000	U
79-34-5	1,1,2,2-Tetrachloroethane	120000	U
108-88-3	Toluene	140000	
108-90-7	Chlorobenzene	120000	U
100-41-4	Ethylbenzene	160000	
100-42-5	Styrene	120000	U
1330-20-7	Xylene (total)	1100000	

1E

VOLATILE ORGANICS ANALYSIS SHEET 0000045
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-002

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5606

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/06/91

Column: (pack/cap) PACK

Dilution Factor: 250

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	C8 KETONE	18.29	2000000	J
2.	CYCLOALKANE	19.40	3000000	J
3.	UNKNOWN	20.37	5000000	J
4.	C10 CYLCOALKANE	20.98	4000000	J
5.	UNKNOWN	21.37	4000000	J
6.	ALKANE	21.82	3000000	J
7.	C3 BENZENE	22.30	3000000	J
8.	C4 BENZENE	22.73	1000000	J
9.	C3 BENZENE	23.30	2000000	J
10.	C10 HYDROCARBON	23.77	1000000	J

1A

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

0000067

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-003

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5110

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/01/91

Column: (pack/cap) CAP

Dilution Factor: 125

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	120000	U
74-83-9	Bromomethane	120000	U
75-01-4	Vinyl Chloride	120000	U
75-00-3	Chloroethane	120000	U
75-09-2	Methylene Chloride	190000	B
67-64-1	Acetone	240000	B
75-15-0	Carbon Disulfide	62000	U
75-35-4	1,1-Dichloroethene	62000	U
75-34-3	1,1-Dichloroethane	62000	U
540-59-0	1,2-Dichloroethene (total)	62000	U
67-66-3	Chloroform	62000	U
107-06-2	1,2-Dichloroethane	62000	U
78-93-3	2-Butanone	120000	U
71-55-6	1,1,1-Trichloroethane	62000	U
56-23-5	Carbon Tetrachloride	62000	U
108-05-4	Vinyl Acetate	120000	U
75-27-4	Bromodichloromethane	62000	U
78-87-5	1,2-Dichloropropane	62000	U
10061-01-5	cis-1,3-Dichloropropene	62000	U
79-01-6	Trichloroethene	62000	U
124-48-1	Dibromochloromethane	62000	U
79-00-5	1,1,2-Trichloroethane	62000	U
71-43-2	Benzene	62000	U
10061-02-6	Trans-1,3-Dichloropropene	62000	U
75-25-2	Bromoform	62000	U
108-10-1	4-Methyl-2-pentanone	120000	U
591-78-6	2-Hexanone	120000	U
127-18-4	Tetrachloroethene	62000	U
79-34-5	1,1,2,2-Tetrachloroethane	62000	U
108-88-3	Toluene	150000	
108-90-7	Chlorobenzene	62000	U
100-41-4	Ethylbenzene	170000	
100-42-5	Styrene	62000	U
1330-20-7	Xylene (total)	1200000	

1E

VOLATILE ORGANICS ANALYSIS SHEET

TENTATIVELY IDENTIFIED COMPOUNDS 0000068

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-003

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5110

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/01/91

Column: (pack/cap) CAP

Dilution Factor: 125

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	18.25	900000	J
2.	CYCLOALKANE	19.35	2000000	J
3.	CYCLOALKANE	20.30	2000000	J
4.	UNKNOWN	20.90	2000000	J
5.	ALKANE	21.78	1000000	J
6.	C3 BENZENE	22.25	2000000	J
7.	C4 BENZENE	22.68	900000	J
8.	C3 BENZENE	23.26	2000000	J
9.	C10 HYDROCARBON	23.73	800000	J
10.	C4 BENZENE	24.08	1000000	J

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000089

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5308

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/03/91

Column: (pack/cap) CAP

Dilution Factor: 62.5

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	62000	U
74-83-9	Bromomethane	62000	U
75-01-4	Vinyl Chloride	62000	U
75-00-3	Chloroethane	62000	U
75-09-2	Methylene Chloride	43000	B
67-64-1	Acetone	74000	B
75-15-0	Carbon Disulfide	31000	U
75-35-4	1,1-Dichloroethene	31000	U
75-34-3	1,1-Dichloroethane	31000	U
540-59-0	1,2-Dichloroethene (total)	31000	U
67-66-3	Chloroform	31000	U
107-06-2	1,2-Dichloroethane	31000	U
78-93-3	2-Butanone	62000	U
71-55-6	1,1,1-Trichloroethane	31000	U
56-23-5	Carbon Tetrachloride	31000	U
108-05-4	Vinyl Acetate	62000	U
75-27-4	Bromodichloromethane	31000	U
78-87-5	1,2-Dichloropropane	31000	U
10061-01-5	cis-1,3-Dichloropropene	31000	U
79-01-6	Trichloroethene	31000	U
124-48-1	Dibromochloromethane	31000	U
79-00-5	1,1,2-Trichloroethane	31000	U
71-43-2	Benzene	31000	U
10061-02-6	Trans-1,3-Dichloropropene	31000	U
75-25-2	Bromoform	31000	U
108-10-1	4-Methyl-2-pentanone	62000	U
591-78-6	2-Hexanone	62000	U
127-18-4	Tetrachloroethene	31000	U
79-34-5	1,1,2,2-Tetrachloroethane	31000	U
108-88-3	Toluene	92000	
108-90-7	Chlorobenzene	31000	U
100-41-4	Ethylbenzene	99000	
100-42-5	Styrene	31000	U
1330-20-7	Xylene (total)	1000000	

1E

VOLATILE ORGANICS ANALYSIS SHEET

TENTATIVELY IDENTIFIED COMPOUNDS 0000090

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5308

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/03/91

Column: (pack/cap) CAP

Dilution Factor: 62.5

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOALKANE	18.55	500000	J
2.	CYCLOALKANE	19.41	700000	J
3.	UNKNOWN	20.36	900000	J
4.	C10 HYDROCARBON	20.42	600000	J
5.	C10 ALKENE	20.95	1000000	J
6.	C3 BENZENE	21.40	1000000	J
7.	ALKANE	21.85	1000000	J
8.	C3 BENZENE	22.33	900000	J
9.	C3 BENZENE	23.31	600000	J
10.	C4 BENZENE	24.14	400000	J

1A
VOLATILE ORGANICS ANALYSIS SHEET

0000111

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5305

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/03/91

Column: (pack/cap) CAP

Dilution Factor: 125

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	120000	U
74-83-9	Bromomethane	120000	U
75-01-4	Vinyl Chloride	120000	U
75-00-3	Chloroethane	120000	U
75-09-2	Methylene Chloride	150000	B
67-64-1	Acetone	81000	JB
75-15-0	Carbon Disulfide	62000	U
75-35-4	1,1-Dichloroethene	62000	U
75-34-3	1,1-Dichloroethane	62000	U
540-59-0	1,2-Dichloroethene (total)	62000	U
67-66-3	Chloroform	62000	U
107-06-2	1,2-Dichloroethane	62000	U
78-93-3	2-Butanone	120000	U
71-55-6	1,1,1-Trichloroethane	62000	U
56-23-5	Carbon Tetrachloride	62000	U
108-05-4	Vinyl Acetate	120000	U
75-27-4	Bromodichloromethane	62000	U
78-87-5	1,2-Dichloropropane	62000	U
10061-01-5	cis-1,3-Dichloropropene	62000	U
79-01-6	Trichloroethene	62000	U
124-48-1	Dibromochloromethane	62000	U
79-00-5	1,1,2-Trichloroethane	62000	U
71-43-2	Benzene	62000	U
10061-02-6	Trans-1,3-Dichloropropene	62000	U
75-25-2	Bromoform	62000	U
108-10-1	4-Methyl-2-pentanone	120000	U
591-78-6	2-Hexanone	120000	U
127-18-4	Tetrachloroethene	62000	U
79-34-5	1,1,2,2-Tetrachloroethane	62000	U
108-88-3	Toluene	22000	J
108-90-7	Chlorobenzene	62000	U
100-41-4	Ethylbenzene	30000	J
100-42-5	Styrene	62000	U
1330-20-7	Xylene (total)	630000	

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000112

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005

Sample wt/vol: 4.00 (g/mL) G

Lab File ID: AX5305

Level: (low/med) MED

Date Received: 04/26/91

% Moisture: not dec. 0

Date Analyzed: 05/03/91

Column: (pack/cap) CAP

Dilution Factor: 125

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	15.84	1000000	J
2.	C8 KETONE	18.32	1000000	J
3.	CYCLOALKANE	19.41	1000000	J
4.	UNKNOWN	20.37	2000000	J
5.	UNKNOWN	20.90	2000000	J
6.	C3 BENZENE	21.17	1000000	J
7.	C3 BENZENE	22.32	2000000	J
8.	C3 BENZENE	23.35	3000000	J
9.	C4 BENZENE	24.15	1000000	J
10.	UNKNOWN	24.31	1000000	J

Roy F. Weston, Inc. - Lionville Laboratory
Semivolatiles by GC/MS, HSL List

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 06/12/91 16:19 Page: 1a

	Cust ID:	B00J39	B00J39	B00J39	B00J39	B00V48	B00V49
Sample Information	RFW#:	001	001 DL	001 MS	001 MSD	002	003
	Matrix:	DRUM	DRUM	DRUM	DRUM	DRUM	DRUM
	D.F.:	100	500	100	100	100	100
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate Recovery	Nitrobenzene-d5	119 %	75 %	83 %	90 %	85 %	85 %
	2-Fluorobiphenyl	109 %	95 %	92 %	96 %	102 %	99 %
	p-Terphenyl-d14	115 %	85 %	94 %	99 %	99 %	96 %
	Phenol-d5	82 %	69 %	67 %	68 %	67 %	67 %
	2-Fluorophenol	102 %	85 %	81 %	66 %	82 %	82 %
	2,4,6-Tribromophenol	94 %	51 %	82 %	94 %	72 %	68 %
Phenol		1000000 U	NA	71 %	72 %	1000000 U	830000 U
bis(2-Chloroethyl)ether		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2-Chlorophenol		1000000 U	NA	68 %	70 %	1000000 U	830000 U
1,3-Dichlorobenzene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
1,4-Dichlorobenzene		1000000 U	NA	69 %	72 %	1000000 U	830000 U
Benzyl alcohol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
1,2-Dichlorobenzene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2-Methylphenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
bis(2-Chloroisopropyl)ether		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Methylphenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
N-Nitroso-Di-n-propylamine		1000000 U	NA	78 %	81 %	1000000 U	830000 U
Hexachloroethane		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Nitrobenzene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Isophorone		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2-Nitrophenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,4-Dimethylphenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzoic acid		5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
bis(2-Chloroethoxy)methane		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,4-Dichlorophenol		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
1,2,4-Trichlorobenzene		1000000 U	NA	79 %	86 %	1000000 U	830000 U
Naphthalene		120000 J	NA	120000 J	110000 J	1000000 U	830000 U
4-Chloroaniline		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Hexachlorobutadiene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Chloro-3-methylphenol		1000000 U	NA	70 %	76 %	1000000 U	830000 U
2-Methylnaphthalene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Hexachlorocyclopentadiene		1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U

*= Outside of EPA CLP QC limits.

409010

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000

Cust ID:	B00J39	B00J39	B00J39	B00J39	B00V48	B00V49
RFW#:	001	001 DL	001 MS	001 MSD	002	003
2,4,6-Trichlorophenol	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,4,5-Trichlorophenol	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
2-Chloronaphthalene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2-Nitroaniline	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
Dimethylphthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Acenaphthylene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,6-Dinitrotoluene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
3-Nitroaniline	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
Acenaphthene	1000000 U	NA	86 %	90 %	1000000 U	830000 U
2,4-Dinitrophenol	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
4-Nitrophenol	5000000 U	NA	70 %	78 %	5000000 U	4200000 U
Dibenzofuran	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
2,4-Dinitrotoluene	1000000 U	NA	74 %	81 %	1000000 U	830000 U
Diethylphthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Chlorophenyl-phenylether	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Fluorene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Nitroaniline	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
4,6-Dinitro-2-methylphenol	5000000 U	NA	5000000 U	5000000 U	5000000 U	4200000 U
N-Nitrosodiphenylamine (1)	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
4-Bromophenyl-phenylether	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Hexachlorobenzene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Pentachlorophenol	5000000 U	NA	63 %	71 %	5000000 U	4200000 U
Phenanthrene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Anthracene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Di-n-Butylphthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Fluoranthene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Pyrene	1000000 U	NA	85 %	88 %	1000000 U	830000 U
Butylbenzylphthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
3,3'-Dichlorobenzidine	2000000 U	NA	2000000 U	2000000 U	2000000 U	1700000 U
Benzo(a)anthracene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Chrysene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
bis(2-Ethylhexyl)phthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Di-n-Octyl phthalate	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzo(b)fluoranthene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzo(k)fluoranthene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzo(a)pyrene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Indeno(1,2,3-cd)pyrene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Dibenzo(a,h)anthracene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Benzo(g,h,i)perylene	1000000 U	NA	1000000 U	1000000 U	1000000 U	830000 U
Tributylphosphate	E	0.30E+08	0.24E+08	0.26E+08	1000000 U	830000 U

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

Roy F. Weston, Inc. - Lionville Laboratory
Semivolatiles by GC/MS, HSL List

RFW Batch Number: 9104L402 | Client: WESTINGHOUSE HANFORD | Work Order: 6168-02-01-0000 | Report Date: 06/12/91 16:19 | Page: 2a

	Cust ID:	BOOV50		BOOV51		BOOV51		SBLK		SBLK BS	
Sample Information	RFW#:	004		005		005 DL		91LE0556-MB1		91LE0556-MB1	
	Matrix:	DRUM		DRUM		DRUM		SOIL		SOIL	
	D.F.:	100		100		1000		100		100	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	Nitrobenzene-d5	95	%	84	%	79	%	103	%	102	%
	2-Fluorobiphenyl	97	%	94	%	90	%	110	%	111	%
	p-Terphenyl-d14	99	%	95	%	82	%	106	%	113	%
	Phenol-d5	71	%	60	%	69	%	94	%	93	%
	2-Fluorophenol	88	%	73	%	85	%	109	%	107	%
	2,4,6-Tribromophenol	80	%	72	%	26	%	92	%	96	%
Phenol		770000	U	910000	U	NA		1000000	U	90	%
bis(2-Chloroethyl)ether		770000	U	910000	U	NA		1000000	U	1000000	U
2-Chlorophenol		770000	U	910000	U	NA		1000000	U	96	%
1,3-Dichlorobenzene		770000	U	910000	U	NA		1000000	U	1000000	U
1,4-Dichlorobenzene		770000	U	910000	U	NA		1000000	U	93	%
Benzyl alcohol		770000	U	910000	U	NA		1000000	U	1000000	U
1,2-Dichlorobenzene		770000	U	910000	U	NA		1000000	U	1000000	U
2-Methylphenol		770000	U	910000	U	NA		1000000	U	1000000	U
bis(2-Chloroisopropyl)ether		770000	U	910000	U	NA		1000000	U	1000000	U
4-Methylphenol		770000	U	910000	U	NA		1000000	U	1000000	U
N-Nitroso-Di-n-propylamine		770000	U	910000	U	NA		1000000	U	87	%
Hexachloroethane		770000	U	910000	U	NA		1000000	U	1000000	U
Nitrobenzene		770000	U	910000	U	NA		1000000	U	1000000	U
Isophorone		770000	U	910000	U	NA		1000000	U	1000000	U
2-Nitrophenol		770000	U	910000	U	NA		1000000	U	1000000	U
2,4-Dimethylphenol		770000	U	910000	U	NA		1000000	U	1000000	U
Benzoic acid		3800000	U	4500000	U	NA		5000000	U	5000000	U
bis(2-Chloroethoxy)methane		770000	U	910000	U	NA		1000000	U	1000000	U
2,4-Dichlorophenol		770000	U	910000	U	NA		1000000	U	1000000	U
1,2,4-Trichlorobenzene		770000	U	910000	U	NA		1000000	U	99	%
Naphthalene		770000	U	110000	J	NA		1000000	U	1000000	U
4-Chloroaniline		770000	U	910000	U	NA		1000000	U	1000000	U
Hexachlorobutadiene		770000	U	910000	U	NA		1000000	U	1000000	U
4-Chloro-3-methylphenol		770000	U	910000	U	NA		1000000	U	93	%
2-Methylnaphthalene		770000	U	910000	U	NA		1000000	U	1000000	U
Hexachlorocyclopentadiene		770000	U	910000	U	NA		1000000	U	1000000	U

*= Outside of EPA CLP QC limits.

Cust ID:	BOOV50		BOOV51		BOOV51	SBLK		SBLK BS	
RFW#:	004		005		005 DL	91LE0556-MB1		91LE0556-MB1	
2,4,6-Trichlorophenol	770000	U	910000	U	NA	1000000	U	1000000	U
2,4,5-Trichlorophenol	3800000	U	4500000	U	NA	5000000	U	5000000	U
2-Chloronaphthalene	770000	U	910000	U	NA	1000000	U	1000000	U
2-Nitroaniline	3800000	U	4500000	U	NA	5000000	U	5000000	U
Dimethylphthalate	770000	U	910000	U	NA	1000000	U	1000000	U
Acenaphthylene	770000	U	910000	U	NA	1000000	U	1000000	U
2,6-Dinitrotoluene	770000	U	910000	U	NA	1000000	U	1000000	U
3-Nitroaniline	3800000	U	4500000	U	NA	5000000	U	5000000	U
Acenaphthene	770000	U	910000	U	NA	1000000	U	105	%
2,4-Dinitrophenol	3800000	U	4500000	U	NA	5000000	U	5000000	U
4-Nitrophenol	3800000	U	4500000	U	NA	5000000	U	75	%
Dibenzofuran	770000	U	910000	U	NA	1000000	U	1000000	U
2,4-Dinitrotoluene	770000	U	910000	U	NA	1000000	U	84	%
Diethylphthalate	770000	U	910000	U	NA	1000000	U	1000000	U
4-Chlorophenyl-phenylether	770000	U	910000	U	NA	1000000	U	1000000	U
Fluorene	770000	U	910000	U	NA	1000000	U	1000000	U
4-Nitroaniline	3800000	U	4500000	U	NA	5000000	U	5000000	U
4,6-Dinitro-2-methylphenol	3800000	U	4500000	U	NA	5000000	U	5000000	U
N-Nitrosodiphenylamine (1)	770000	U	910000	U	NA	1000000	U	1000000	U
4-Bromophenyl-phenylether	770000	U	910000	U	NA	1000000	U	1000000	U
Hexachlorobenzene	770000	U	910000	U	NA	1000000	U	1000000	U
Pentachlorophenol	3800000	U	4500000	U	NA	5000000	U	89	%
Phenanthrene	770000	U	910000	U	NA	1000000	U	1000000	U
Anthracene	770000	U	910000	U	NA	1000000	U	1000000	U
Di-n-Butylphthalate	770000	U	910000	U	NA	1000000	U	1000000	U
Fluoranthene	770000	U	910000	U	NA	1000000	U	1000000	U
Pyrene	770000	U	910000	U	NA	1000000	U	103	%
Butylbenzylphthalate	770000	U	910000	U	NA	1000000	U	1000000	U
3,3'-Dichlorobenzidine	1500000	U	1800000	U	NA	2000000	U	2000000	U
Benzo(a)anthracene	770000	U	910000	U	NA	1000000	U	1000000	U
Chrysene	770000	U	910000	U	NA	1000000	U	1000000	U
bis(2-Ethylhexyl)phthalate	770000	U	910000	U	NA	1000000	U	1000000	U
Di-n-Octyl phthalate	770000	U	910000	U	NA	1000000	U	1000000	U
Benzo(b)fluoranthene	770000	U	910000	U	NA	1000000	U	1000000	U
Benzo(k)fluoranthene	770000	U	910000	U	NA	1000000	U	1000000	U
Benzo(a)pyrene	770000	U	910000	U	NA	1000000	U	1000000	U
Indeno(1,2,3-cd)pyrene	770000	U	910000	U	NA	1000000	U	1000000	U
Dibenzo(a,h)anthracene	770000	U	910000	U	NA	1000000	U	1000000	U
Benzo(g,h,i)perylene	770000	U	910000	U	NA	1000000	U	1000000	U
Tributylphosphate	770000	U		E	0.23E+08	1000000	U	1000000	U

(1) - Cannot be separated from Diphenylamine. *= Outside of EPA CLP QC limits.

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000022

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-001

Sample wt/vol: 1.00 (g/mL) G Lab File ID: V060313

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/03/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	1000000	U
111-44-4	bis(2-Chloroethyl)ether	1000000	U
95-57-8	2-Chlorophenol	1000000	U
541-73-1	1,3-Dichlorobenzene	1000000	U
106-46-7	1,4-Dichlorobenzene	1000000	U
100-51-6	Benzyl alcohol	1000000	U
95-50-1	1,2-Dichlorobenzene	1000000	U
95-48-7	2-Methylphenol	1000000	U
108-60-1	bis(2-Chloroisopropyl)ether	1000000	U
106-44-5	4-Methylphenol	1000000	U
621-64-7	N-Nitroso-Di-n-propylamine	1000000	U
67-72-1	Hexachloroethane	1000000	U
98-95-3	Nitrobenzene	1000000	U
78-59-1	Isophorone	1000000	U
88-75-5	2-Nitrophenol	1000000	U
105-67-9	2,4-Dimethylphenol	1000000	U
65-85-0	Benzoic acid	5000000	U
111-91-1	bis(2-Chloroethoxy)methane	1000000	U
120-83-2	2,4-Dichlorophenol	1000000	U
120-82-1	1,2,4-Trichlorobenzene	1000000	U
91-20-3	Naphthalene	120000	J
106-47-8	4-Chloroaniline	1000000	U
87-68-3	Hexachlorobutadiene	1000000	U
59-50-7	4-Chloro-3-methylphenol	1000000	U
91-57-6	2-Methylnaphthalene	1000000	U
77-47-4	Hexachlorocyclopentadiene	1000000	U
88-06-2	2,4,6-Trichlorophenol	1000000	U
95-95-4	2,4,5-Trichlorophenol	5000000	U
91-58-7	2-Chloronaphthalene	1000000	U
88-74-4	2-Nitroaniline	5000000	U
131-11-3	Dimethylphthalate	1000000	U
208-96-8	Acenaphthylene	1000000	U
606-20-2	2,6-Dinitrotoluene	1000000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000023

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-001

Sample wt/vol: 1.00 (g/mL) G Lab File ID: V060313

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/03/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	5000000	U
83-32-9	Acenaphthene	1000000	U
51-28-5	2,4-Dinitrophenol	5000000	U
100-02-7	4-Nitrophenol	5000000	U
132-64-9	Dibenzofuran	1000000	U
121-14-2	2,4-Dinitrotoluene	1000000	U
84-66-2	Diethylphthalate	1000000	U
7005-72-3	4-Chlorophenyl-phenylether	1000000	U
86-73-7	Fluorene	1000000	U
100-01-6	4-Nitroaniline	5000000	U
534-52-1	4,6-Dinitro-2-methylphenol	5000000	U
86-30-6	N-Nitrosodiphenylamine (1)	1000000	U
101-55-3	4-Bromophenyl-phenylether	1000000	U
118-74-1	Hexachlorobenzene	1000000	U
87-86-5	Pentachlorophenol	5000000	U
85-01-8	Phenanthrene	1000000	U
120-12-7	Anthracene	1000000	U
84-74-2	Di-n-Butylphthalate	1000000	U
206-44-0	Fluoranthene	1000000	U
129-00-0	Pyrene	1000000	U
85-68-7	Butylbenzylphthalate	1000000	U
91-94-1	3,3'-Dichlorobenzidine	2000000	U
56-55-3	Benzo(a)anthracene	1000000	U
218-01-9	Chrysene	1000000	U
117-81-7	bis(2-Ethylhexyl)phthalate	1000000	U
117-84-0	Di-n-Octyl phthalate	1000000	U
205-99-2	Benzo(b)fluoranthene	1000000	U
207-08-9	Benzo(k)fluoranthene	1000000	U
50-32-8	Benzo(a)pyrene	1000000	U
193-39-5	Indeno(1,2,3-cd)pyrene	1000000	U
53-70-3	Dibenzo(a,h)anthracene	1000000	U
191-24-2	Benzo(g,h,i)perylene	1000000	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000025

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: V060313

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/03/91

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

Dilution Factor: 100

Number TICs found: 21

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOALKANE	4.18	10000000	J
2.	ETHYLMETHYLCYCLOHEXANE	4.23	10000000	J
3.	ALKANE	4.41	40000000	J
4.	ETHYLMETHYLCYCLOHEXANE	4.59	10000000	J
5.	C3 CYCLOHEXANE	4.81	20000000	J
6.	ALKANE	5.00	60000000	J
7.	ALKANE	5.14	30000000	J
8.	UNKNOWN	5.46	40000000	J
9.	ALKANE	5.52	30000000	J
10.	UNKNOWN	5.64	20000000	J
11.	CYCLOALKANE	5.73	40000000	J
12.	CYCLOALKANE	5.89	40000000	J
13.	ALKANE	6.12	70000000	J
14.	UNKNOWN	6.33	20000000	J
15.	ALKANE	6.49	40000000	J
16.	TRIMETHYLBENZENE	6.55	20000000	J
17.	ALKYL CYCLOHEXANE	6.68	20000000	J
18.	HYDROCARBON	6.73	20000000	J
19.	C4 BENZENE	6.98	10000000	J
20.	UNKNOWN	7.11	20000000	J
21.	ALKANE	7.63	20000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000061

CLIENT SAMPLE NO.

BOOJ39DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001 DL

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060708

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 500

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

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

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000062

CLIENT SAMPLE NO.

BOOJ39DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001 DL

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060708

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 500

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

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000022

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: V060313

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/03/91

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

Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	1000000	U
111-44-4	bis(2-Chloroethyl)ether	1000000	U
95-57-8	2-Chlorophenol	1000000	U
541-73-1	1,3-Dichlorobenzene	1000000	U
106-46-7	1,4-Dichlorobenzene	1000000	U
100-51-6	Benzyl alcohol	1000000	U
95-50-1	1,2-Dichlorobenzene	1000000	U
95-48-7	2-Methylphenol	1000000	U
108-60-1	bis(2-Chloroisopropyl)ether	1000000	U
106-44-5	4-Methylphenol	1000000	U
621-64-7	N-Nitroso-Di-n-propylamine	1000000	U
67-72-1	Hexachloroethane	1000000	U
98-95-3	Nitrobenzene	1000000	U
78-59-1	Isophorone	1000000	U
88-75-5	2-Nitrophenol	1000000	U
105-67-9	2,4-Dimethylphenol	1000000	U
65-85-0	Benzoic acid	5000000	U
111-91-1	bis(2-Chloroethoxy)methane	1000000	U
120-83-2	2,4-Dichlorophenol	1000000	U
120-82-1	1,2,4-Trichlorobenzene	1000000	U
91-20-3	Naphthalene	120000	J
106-47-8	4-Chloroaniline	1000000	U
87-68-3	Hexachlorobutadiene	1000000	U
59-50-7	4-Chloro-3-methylphenol	1000000	U
91-57-6	2-Methylnaphthalene	1000000	U
77-47-4	Hexachlorocyclopentadiene	1000000	U
88-06-2	2,4,6-Trichlorophenol	1000000	U
95-95-4	2,4,5-Trichlorophenol	5000000	U
91-58-7	2-Chloronaphthalene	1000000	U
88-74-4	2-Nitroaniline	5000000	U
131-11-3	Dimethylphthalate	1000000	U
208-96-8	Acenaphthylene	1000000	U
606-20-2	2,6-Dinitrotoluene	1000000	U

1D

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000063

CLIENT SAMPLE NO.

BOOJ39DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001 DL

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060708

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 500

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
126-73-8	Tributylphosphate	0.30E+08	

FORM 1 SV-3 12/88 Rev.

87-68-3	Hexachlorobutadiene	1000000	U
59-50-7	4-Chloro-3-methylphenol	1000000	U

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000072

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-002

Sample wt/vol: 1.00 (g/mL) G Lab File ID: J060711

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	1000000	U
111-44-4	bis(2-Chloroethyl)ether	1000000	U
95-57-8	2-Chlorophenol	1000000	U
541-73-1	1,3-Dichlorobenzene	1000000	U
106-46-7	1,4-Dichlorobenzene	1000000	U
100-51-6	Benzyl alcohol	1000000	U
95-50-1	1,2-Dichlorobenzene	1000000	U
95-48-7	2-Methylphenol	1000000	U
108-60-1	bis(2-Chloroisopropyl)ether	1000000	U
106-44-5	4-Methylphenol	1000000	U
621-64-7	N-Nitroso-Di-n-propylamine	1000000	U
67-72-1	Hexachloroethane	1000000	U
98-95-3	Nitrobenzene	1000000	U
78-59-1	Isophorone	1000000	U
88-75-5	2-Nitrophenol	1000000	U
105-67-9	2,4-Dimethylphenol	1000000	U
65-85-0	Benzoic acid	5000000	U
111-91-1	bis(2-Chloroethoxy)methane	1000000	U
120-83-2	2,4-Dichlorophenol	1000000	U
120-82-1	1,2,4-Trichlorobenzene	1000000	U
91-20-3	Naphthalene	1000000	U
106-47-8	4-Chloroaniline	1000000	U
87-68-3	Hexachlorobutadiene	1000000	U
59-50-7	4-Chloro-3-methylphenol	1000000	U
91-57-6	2-Methylnaphthalene	1000000	U
77-47-4	Hexachlorocyclopentadiene	1000000	U
88-06-2	2,4,6-Trichlorophenol	1000000	U
95-95-4	2,4,5-Trichlorophenol	5000000	U
91-58-7	2-Chloronaphthalene	1000000	U
88-74-4	2-Nitroaniline	5000000	U
131-11-3	Dimethylphthalate	1000000	U
208-96-8	Acenaphthylene	1000000	U
606-20-2	2,6-Dinitrotoluene	1000000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000073

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-002

Sample wt/vol: 1.00 (g/mL) G Lab File ID: J060711

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	5000000	U
83-32-9	Acenaphthene	1000000	U
51-28-5	2,4-Dinitrophenol	5000000	U
100-02-7	4-Nitrophenol	5000000	U
132-64-9	Dibenzofuran	1000000	U
121-14-2	2,4-Dinitrotoluene	1000000	U
84-66-2	Diethylphthalate	1000000	U
7005-72-3	4-Chlorophenyl-phenylether	1000000	U
86-73-7	Fluorene	1000000	U
100-01-6	4-Nitroaniline	5000000	U
534-52-1	4,6-Dinitro-2-methylphenol	5000000	U
86-30-6	N-Nitrosodiphenylamine (1)	1000000	U
101-55-3	4-Bromophenyl-phenylether	1000000	U
118-74-1	Hexachlorobenzene	1000000	U
87-86-5	Pentachlorophenol	5000000	U
85-01-8	Phenanthrene	1000000	U
120-12-7	Anthracene	1000000	U
84-74-2	Di-n-Butylphthalate	1000000	U
206-44-0	Fluoranthene	1000000	U
129-00-0	Pyrene	1000000	U
85-68-7	Butylbenzylphthalate	1000000	U
91-94-1	3,3'-Dichlorobenzidine	2000000	U
56-55-3	Benzo(a)anthracene	1000000	U
218-01-9	Chrysene	1000000	U
117-81-7	bis(2-Ethylhexyl)phthalate	1000000	U
117-84-0	Di-n-Octyl phthalate	1000000	U
205-99-2	Benzo(b)fluoranthene	1000000	U
207-08-9	Benzo(k)fluoranthene	1000000	U
50-32-8	Benzo(a)pyrene	1000000	U
193-39-5	Indeno(1,2,3-cd)pyrene	1000000	U
53-70-3	Dibenzo(a,h)anthracene	1000000	U
191-24-2	Benzo(g,h,i)perylene	1000000	U

(1) - Cannot be separated from Diphenylamine

1D

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000074

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-002

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060711

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

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

CAS NO.	COMPOUND		
126-73-8	Tributylphosphate	1000000	U

FORM 1 SV-3

12/88 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000075

CLIENT SAMPLE NO.

BOOV48

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-002

Sample wt/vol: 1.00 (g/mL) G

Lab File ID: J060711

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOALKANE	5.36	800000	J
2.	ETHYLMETHYLCYCLOHEXANE	5.42	2000000	J
3.	ALKANE	5.56	4000000	J
4.	ETHYLMETHYLCYCLOHEXANE	5.76	2000000	J
5.	CYCLOALKANE	6.00	2000000	J
6.	UNKNOWN	6.16	6000000	J
7.	ALKANE	6.31	1000000	J
8.	ALKANE	6.52	3000000	J
9.	CYCLOALKANE	6.68	10000000	J
10.	ALKANE	6.81	4000000	J
11.	UNKNOWN	6.98	2000000	J
12.	UNKNOWN	7.11	7000000	J
13.	ALKANE	7.33	10000000	J
14.	ALKANE	7.70	4000000	J
15.	DIETHYLBENZENE	7.82	2000000	J
16.	CYCLOHEXANE	7.94	3000000	J
17.	C4 BENZENE	8.26	2000000	J
18.	ALKANE	8.37	2000000	J
19.	DECAHYDRONAPHTHALENE	8.42	1000000	J
20.	ALKANE	8.97	2000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000103

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-003

Sample wt/vol: 1.20 (g/mL) G Lab File ID: J060712

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	830000	U
111-44-4	bis(2-Chloroethyl)ether	830000	U
95-57-8	2-Chlorophenol	830000	U
541-73-1	1,3-Dichlorobenzene	830000	U
106-46-7	1,4-Dichlorobenzene	830000	U
100-51-6	Benzyl alcohol	830000	U
95-50-1	1,2-Dichlorobenzene	830000	U
95-48-7	2-Methylphenol	830000	U
108-60-1	bis(2-Chloroisopropyl)ether	830000	U
106-44-5	4-Methylphenol	830000	U
621-64-7	N-Nitroso-Di-n-propylamine	830000	U
67-72-1	Hexachloroethane	830000	U
98-95-3	Nitrobenzene	830000	U
78-59-1	Isophorone	830000	U
88-75-5	2-Nitrophenol	830000	U
105-67-9	2,4-Dimethylphenol	830000	U
65-85-0	Benzoic acid	4200000	U
111-91-1	bis(2-Chloroethoxy)methane	830000	U
120-83-2	2,4-Dichlorophenol	830000	U
120-82-1	1,2,4-Trichlorobenzene	830000	U
91-20-3	Naphthalene	830000	U
106-47-8	4-Chloroaniline	830000	U
87-68-3	Hexachlorobutadiene	830000	U
59-50-7	4-Chloro-3-methylphenol	830000	U
91-57-6	2-Methylnaphthalene	830000	U
77-47-4	Hexachlorocyclopentadiene	830000	U
88-06-2	2,4,6-Trichlorophenol	830000	U
95-95-4	2,4,5-Trichlorophenol	4200000	U
91-58-7	2-Chloronaphthalene	830000	U
88-74-4	2-Nitroaniline	4200000	U
131-11-3	Dimethylphthalate	830000	U
208-96-8	Acenaphthylene	830000	U
606-20-2	2,6-Dinitrotoluene	830000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000104

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-003

Sample wt/vol: 1.20 (g/mL) G Lab File ID: J060712

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	4200000	U
83-32-9	Acenaphthene	830000	U
51-28-5	2,4-Dinitrophenol	4200000	U
100-02-7	4-Nitrophenol	4200000	U
132-64-9	Dibenzofuran	830000	U
121-14-2	2,4-Dinitrotoluene	830000	U
84-66-2	Diethylphthalate	830000	U
7005-72-3	4-Chlorophenyl-phenylether	830000	U
86-73-7	Fluorene	830000	U
100-01-6	4-Nitroaniline	4200000	U
534-52-1	4,6-Dinitro-2-methylphenol	4200000	U
86-30-6	N-Nitrosodiphenylamine (1)	830000	U
101-55-3	4-Bromophenyl-phenylether	830000	U
118-74-1	Hexachlorobenzene	830000	U
87-86-5	Pentachlorophenol	4200000	U
85-01-8	Phenanthrene	830000	U
120-12-7	Anthracene	830000	U
84-74-2	Di-n-Butylphthalate	830000	U
206-44-0	Fluoranthene	830000	U
129-00-0	Pyrene	830000	U
85-68-7	Butylbenzylphthalate	830000	U
91-94-1	3,3'-Dichlorobenzidine	1700000	U
56-55-3	Benzo(a)anthracene	830000	U
218-01-9	Chrysene	830000	U
117-81-7	bis(2-Ethylhexyl)phthalate	830000	U
117-84-0	Di-n-Octyl phthalate	830000	U
205-99-2	Benzo(b)fluoranthene	830000	U
207-08-9	Benzo(k)fluoranthene	830000	U
50-32-8	Benzo(a)pyrene	830000	U
193-39-5	Indeno(1,2,3-cd)pyrene	830000	U
53-70-3	Dibenzo(a,h)anthracene	830000	U
191-24-2	Benzo(g,h,i)perylene	830000	U

(1) - Cannot be separated from Diphenylamine

1D

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000105

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-003

Sample wt/vol: 1.20 (g/mL) G

Lab File ID: J060712

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

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

CAS NO.	COMPOUND		
126-73-8	Tributylphosphate	830000	U

FORM 1 SV-3

12/88 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000106

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-003

Sample wt/vol: 1.20 (g/mL) G Lab File ID: J060712

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

Number TICs found: 21

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOALKANE	5.33	4000000	J
2.	ETHYLMETHYLCYCLOHEXANE	5.40	9000000	J
3.	ALKANE	5.54	20000000	J
4.	ETHYLMETHYLCYCLOHEXANE	5.74	9000000	J
5.	ALKYLCYCLOHEXANE	5.98	10000000	J
6.	UNKNOWN	6.14	30000000	J
7.	ALKANE	6.28	8000000	J
8.	UNKNOWN	6.40	2000000	J
9.	ALKANE	6.51	20000000	J
10.	ALKANE	6.65	60000000	J
11.	ALKANE	6.79	20000000	J
12.	UNKNOWN	6.95	30000000	J
13.	ALKANE	7.08	40000000	J
14.	ALKANE	7.32	70000000	J
15.	ALKANE	7.68	20000000	J
16.	HYDROCARBON	7.84	10000000	J
17.	ALKYLCYCLOHEXANE	7.93	20000000	J
18.	C4 BENZENE	8.23	8000000	J
19.	ALKANE	8.35	8000000	J
20.	DECAHYDRONAPHTHALENE	8.41	8000000	J
21.	ALKANE	8.94	9000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000136

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 1.30 (g/mL) G

Lab File ID: J060715

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	770000	U
111-44-4	bis(2-Chloroethyl)ether	770000	U
95-57-8	2-Chlorophenol	770000	U
541-73-1	1,3-Dichlorobenzene	770000	U
106-46-7	1,4-Dichlorobenzene	770000	U
100-51-6	Benzyl alcohol	770000	U
95-50-1	1,2-Dichlorobenzene	770000	U
95-48-7	2-Methylphenol	770000	U
108-60-1	bis(2-Chloroisopropyl)ether	770000	U
106-44-5	4-Methylphenol	770000	U
621-64-7	N-Nitroso-Di-n-propylamine	770000	U
67-72-1	Hexachloroethane	770000	U
98-95-3	Nitrobenzene	770000	U
78-59-1	Isophorone	770000	U
88-75-5	2-Nitrophenol	770000	U
105-67-9	2,4-Dimethylphenol	770000	U
65-85-0	Benzoic acid	3800000	U
111-91-1	bis(2-Chloroethoxy)methane	770000	U
120-83-2	2,4-Dichlorophenol	770000	U
120-82-1	1,2,4-Trichlorobenzene	770000	U
91-20-3	Naphthalene	770000	U
106-47-8	4-Chloroaniline	770000	U
87-68-3	Hexachlorobutadiene	770000	U
59-50-7	4-Chloro-3-methylphenol	770000	U
91-57-6	2-Methylnaphthalene	770000	U
77-47-4	Hexachlorocyclopentadiene	770000	U
88-06-2	2,4,6-Trichlorophenol	770000	U
95-95-4	2,4,5-Trichlorophenol	3800000	U
91-58-7	2-Chloronaphthalene	770000	U
88-74-4	2-Nitroaniline	3800000	U
131-11-3	Dimethylphthalate	770000	U
208-96-8	Acenaphthylene	770000	U
606-20-2	2,6-Dinitrotoluene	770000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000137

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-004

Sample wt/vol: 1.30 (g/mL) G Lab File ID: J060715

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
99-09-2	3-Nitroaniline	3800000	U
83-32-9	Acenaphthene	770000	U
51-28-5	2,4-Dinitrophenol	3800000	U
100-02-7	4-Nitrophenol	3800000	U
132-64-9	Dibenzofuran	770000	U
121-14-2	2,4-Dinitrotoluene	770000	U
84-66-2	Diethylphthalate	770000	U
7005-72-3	4-Chlorophenyl-phenylether	770000	U
86-73-7	Fluorene	770000	U
100-01-6	4-Nitroaniline	3800000	U
534-52-1	4,6-Dinitro-2-methylphenol	3800000	U
86-30-6	N-Nitrosodiphenylamine (1)	770000	U
101-55-3	4-Bromophenyl-phenylether	770000	U
118-74-1	Hexachlorobenzene	770000	U
87-86-5	Pentachlorophenol	3800000	U
85-01-8	Phenanthrene	770000	U
120-12-7	Anthracene	770000	U
84-74-2	Di-n-Butylphthalate	770000	U
206-44-0	Fluoranthene	770000	U
129-00-0	Pyrene	770000	U
85-68-7	Butylbenzylphthalate	770000	U
91-94-1	3,3'-Dichlorobenzidine	1500000	U
56-55-3	Benzo(a)anthracene	770000	U
218-01-9	Chrysene	770000	U
117-81-7	bis(2-Ethylhexyl)phthalate	770000	U
117-84-0	Di-n-Octyl phthalate	770000	U
205-99-2	Benzo(b)fluoranthene	770000	U
207-08-9	Benzo(k)fluoranthene	770000	U
50-32-8	Benzo(a)pyrene	770000	U
193-39-5	Indeno(1,2,3-cd)pyrene	770000	U
53-70-3	Dibenzo(a,h)anthracene	770000	U
191-24-2	Benzo(g,h,i)perylene	770000	U

(1) - Cannot be separated from Diphenylamine

1D

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000138

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 1.30 (g/mL) G

Lab File ID: J060715

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
126-73-8	Tributylphosphate	770000	U

FORM 1 SV-3

12/88 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000139

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 1.30 (g/mL) G

Lab File ID: J060715

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

Number TICs found: 21

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	5.55	4000000	J
2.	CYCLOALKANE	5.98	2000000	J
3.	ALKENE	6.14	6000000	J
4.	PROPYLHEPTANE	6.28	3000000	J
5.	ALKANE	6.51	2000000	J
6.	UNKNOWN	6.66	7000000	J
7.	CYCLOALKANE	6.90	3000000	J
8.	UNKNOWN	6.95	2000000	J
9.	CYCLOALKANE	7.08	3000000	J
10.	CYCLOALKANE	7.13	2000000	J
11.	ALKANE	7.31	9000000	J
12.	ALKANE	7.68	3000000	J
13.	ALKYLCYCLOHEXANE	7.93	3000000	J
14.	C4 BENZENE	8.25	2000000	J
15.	ALKANE	8.97	5000000	J
16.	ALKANE	10.60	9000000	J
17.	ALKANE	10.79	2000000	J
18.	ALKANE	11.69	10000000	J
19.	ALKANE	12.12	30000000	J
20.	ALKYLCYCLOHEXANE	12.84	6000000	J
21.	ALKANE	13.54	20000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000169

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-005

Sample wt/vol: 1.10 (g/mL) G Lab File ID: J060713

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
108-95-2	Phenol	910000	U
111-44-4	bis(2-Chloroethyl)ether	910000	U
95-57-8	2-Chlorophenol	910000	U
541-73-1	1,3-Dichlorobenzene	910000	U
106-46-7	1,4-Dichlorobenzene	910000	U
100-51-6	Benzyl alcohol	910000	U
95-50-1	1,2-Dichlorobenzene	910000	U
95-48-7	2-Methylphenol	910000	U
108-60-1	bis(2-Chloroisopropyl)ether	910000	U
106-44-5	4-Methylphenol	910000	U
621-64-7	N-Nitroso-Di-n-propylamine	910000	U
67-72-1	Hexachloroethane	910000	U
98-95-3	Nitrobenzene	910000	U
78-59-1	Isophorone	910000	U
88-75-5	2-Nitrophenol	910000	U
105-67-9	2,4-Dimethylphenol	910000	U
65-85-0	Benzoic acid	4500000	U
111-91-1	bis(2-Chloroethoxy)methane	910000	U
120-83-2	2,4-Dichlorophenol	910000	U
120-82-1	1,2,4-Trichlorobenzene	910000	U
91-20-3	Naphthalene	110000	J
106-47-8	4-Chloroaniline	910000	U
87-68-3	Hexachlorobutadiene	910000	U
59-50-7	4-Chloro-3-methylphenol	910000	U
91-57-6	2-Methylnaphthalene	910000	U
77-47-4	Hexachlorocyclopentadiene	910000	U
88-06-2	2,4,6-Trichlorophenol	910000	U
95-95-4	2,4,5-Trichlorophenol	4500000	U
91-58-7	2-Chloronaphthalene	910000	U
88-74-4	2-Nitroaniline	4500000	U
131-11-3	Dimethylphthalate	910000	U
208-96-8	Acenaphthylene	910000	U
606-20-2	2,6-Dinitrotoluene	910000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000170

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-005

Sample wt/vol: 1.10 (g/mL) G Lab File ID: J060713

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	4500000	U
83-32-9	Acenaphthene	910000	U
51-28-5	2,4-Dinitrophenol	4500000	U
100-02-7	4-Nitrophenol	4500000	U
132-64-9	Dibenzofuran	910000	U
121-14-2	2,4-Dinitrotoluene	910000	U
84-66-2	Diethylphthalate	910000	U
7005-72-3	4-Chlorophenyl-phenylether	910000	U
86-73-7	Fluorene	910000	U
100-01-6	4-Nitroaniline	4500000	U
534-52-1	4,6-Dinitro-2-methylphenol	4500000	U
86-30-6	N-Nitrosodiphenylamine (1)	910000	U
101-55-3	4-Bromophenyl-phenylether	910000	U
118-74-1	Hexachlorobenzene	910000	U
87-86-5	Pentachlorophenol	4500000	U
85-01-8	Phenanthrene	910000	U
120-12-7	Anthracene	910000	U
84-74-2	Di-n-Butylphthalate	910000	U
206-44-0	Fluoranthene	910000	U
129-00-0	Pyrene	910000	U
85-68-7	Butylbenzylphthalate	910000	U
91-94-1	3,3'-Dichlorobenzidine	1800000	U
56-55-3	Benzo(a)anthracene	910000	U
218-01-9	Chrysene	910000	U
117-81-7	bis(2-Ethylhexyl)phthalate	910000	U
117-84-0	Di-n-Octyl phthalate	910000	U
205-99-2	Benzo(b)fluoranthene	910000	U
207-08-9	Benzo(k)fluoranthene	910000	U
50-32-8	Benzo(a)pyrene	910000	U
193-39-5	Indeno(1,2,3-cd)pyrene	910000	U
53-70-3	Dibenzo(a,h)anthracene	910000	U
191-24-2	Benzo(g,h,i)perylene	910000	U

(1) - Cannot be separated from Diphenylamine

1D

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000171

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005

Sample wt/vol: 1.10 (g/mL) G

Lab File ID: J060713

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 100

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

CAS NO.	COMPOUND		
126-73-8	Tributylphosphate		E

FORM 1 SV-3

12/88 Rev.

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000172

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-005

Sample wt/vol: 1.10 (g/mL) G Lab File ID: J060713

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 100

Number TICs found: 21

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	TRIMETHYLCYCLOHEXANE	5.19	600000	J
2.	CYCLOALKANE	5.33	3000000	J
3.	ALKANE	5.54	4000000	J
4.	CYCLOALKANE	5.60	1000000	J
5.	ETHYLMETHYLCYCLOHEXANE	5.74	2000000	J
6.	CYCLOALKANE	5.98	3000000	J
7.	UNKNOWN	6.13	8000000	J
8.	ALKANE	6.27	4000000	J
9.	CYCLOALKANE	6.47	2000000	J
10.	UNKNOWN	6.64	8000000	J
11.	UNKNOWN	6.81	3000000	J
12.	CYCLOALKANE	6.89	2000000	J
13.	UNKNOWN	6.94	2000000	J
14.	UNKNOWN	7.07	5000000	J
15.	ALKANE	7.28	8000000	J
16.	ALKANE	7.66	4000000	J
17.	TRIMETHYLBENZENE	7.79	3000000	J
18.	ALKANE	7.94	3000000	J
19.	C4 BENZENE	8.23	3000000	J
20.	DECAHYDRONAPHTHALENE	8.40	2000000	J
21.	ALKANE	8.94	2000000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000206

CLIENT SAMPLE NO.

BOOV51DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-005 DL

Sample wt/vol: 1.10 (g/mL) G Lab File ID: J060714

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1000

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

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000207

CLIENT SAMPLE NO.

BOOV51DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-005 DL

Sample wt/vol: 1.10 (g/mL) G Lab File ID: J060714

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 0 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A Date Analyzed: 06/07/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1000

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

(1) - Cannot be separated from Diphenylamine

1D

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000208

CLIENT SAMPLE NO.

BOOV51DL

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-005 DL

Sample wt/vol: 1.10 (g/mL) G

Lab File ID: J060714

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 0 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) N/A

Date Analyzed: 06/07/91

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

Dilution Factor: 1000

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

CAS NO.	COMPOUND		
126-73-8	Tributylphosphate	0.23E+08	

FORM 1 SV-3

12/88 Rev.

Roy F. Weston, Inc. - Lionville Laboratory
PCBs by GC

RFW Batch Number: 9104L402 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 06/03/91 11:11 Page: 1

	Cust ID:	BOOJ39	BOOJ39	BOOJ39	BOOV48	BOOV49	BOOV50
Sample Information	RFW#:	001	001 MS	001 MSD	002	003	004
	Matrix:	DRUM	DRUM	DRUM	DRUM	DRUM	DRUM
	D.F.:	0.500	0.500	0.500	0.500	0.500	0.500
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate: Di-n-butylchlorendate		76 %	79 %	79 %	85 %	85 %	85 %
Aroclor-1016		12000 U UJ	12000 U	12000 U	12000 U UJ	12000 U UJ	12000 U UJ
Aroclor-1221		12000 U	12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1232		12000 U	12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1242		12000 U	12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1248		12000 U	12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1254		24000 U	74 %	77 %	24000 U	24000 U	24000 U
Aroclor-1260		24000 U	24000 U	24000 U	24000 U	24000 U	24000 U

	Cust ID:	BOOV51	PBLK	PBLK BS	PBLK	PBLK BS
Sample Information	RFW#:	005	91LE0584-MB1	91LE0584-MB1	91LE0559-MB1	91LE0559-MB1
	Matrix:	DRUM	SOIL	SOIL	SOIL	SOIL
	D.F.:	0.500	0.500	0.500	0.500	0.500
	Units:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate: Di-n-butylchlorendate		87 %	78 %	74 %	83 %	83 %
Aroclor-1016		12000 U UJ	12000 U	12000 U	12000 U	12000 U
Aroclor-1221		12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1232		12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1242		12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1248		12000 U	12000 U	12000 U	12000 U	12000 U
Aroclor-1254		24000 U	24000 U	75 %	24000 U	79 %
Aroclor-1260		24000 U	24000 U	24000 U	24000 U	24000 U

7-30-91 [illegible]

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not requested. NS= Not spiked.
%= Percent recovery. D= Diluted out. I= Interference. NA= Not Applicable. *= Outside of EPA CLP QC

000047

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0000015

CLIENT SAMPLE NO.

BOOJ39

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-001

Sample wt/vol: 0.100 (g/mL) G

Lab File ID: 05299103.49

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 100 dec.

Date Extracted: 05/06/91

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 05/30/91

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

Dilution Factor: 0.500

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

CAS NO.	COMPOUND		
12674-11-2	Aroclor-1016	12000	U UJ
11104-28-2	Aroclor-1221	12000	U
11141-16-5	Aroclor-1232	12000	U
53469-21-9	Aroclor-1242	12000	U
12672-29-6	Aroclor-1248	12000	U
11097-69-1	Aroclor-1254	24000	U
11096-82-5	Aroclor-1260	24000	U

DEL 6/4/91

7-30-91 WSumek

FORM 1 PEST 12/88 Rev.

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0 0 0 0 0 2 1

CLIENT SAMPLE NO.

BOOV49

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-003

Sample wt/vol: 0.100 (g/mL) G

Lab File ID: 05289109.29

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 100 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 05/29/91

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

Dilution Factor: 0.500

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

CAS NO.	COMPOUND		
12674-11-2	Aroclor-1016	12000	U UJ
11104-28-2	Aroclor-1221	12000	U
11141-16-5	Aroclor-1232	12000	U
53469-21-9	Aroclor-1242	12000	U
12672-29-6	Aroclor-1248	12000	U
11097-69-1	Aroclor-1254	24000	U
11096-82-5	Aroclor-1260	24000	U

DEC 6/4/91

FORM 1 PEST

12/88 Rev.

7-30-91
WSumell

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0000024

CLIENT SAMPLE NO.

BOOV50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM

Lab Sample ID: 9104L402-004

Sample wt/vol: 0.100 (g/mL) G

Lab File ID: 05289109.30

Level: (low/med) LOW

Date Received: 04/26/91

% Moisture: not dec. 100 dec.

Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 05/29/91

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

Dilution Factor: 0.500

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

CAS NO.	COMPOUND			
12674-11-2	Aroclor-1016	12000	U	UJ
11104-28-2	Aroclor-1221	12000	U	
11141-16-5	Aroclor-1232	12000	U	
53469-21-9	Aroclor-1242	12000	U	
12672-29-6	Aroclor-1248	12000	U	
11097-69-1	Aroclor-1254	24000	U	
11096-82-5	Aroclor-1260	24000	U	

DEL 6/4/91

FORM 1 PEST

12/88 Rev.

7-30-91
WSimell

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0000027

CLIENT SAMPLE NO.

BOOV51

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: DRUM Lab Sample ID: 9104L402-005

Sample wt/vol: 0.100 (g/mL) G Lab File ID: 05289109.31

Level: (low/med) LOW Date Received: 04/26/91

% Moisture: not dec. 100 dec. Date Extracted: 04/29/91

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/29/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 0.500

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

CAS NO.	COMPOUND		
12674-11-2	Aroclor-1016	12000	U UJ
11104-28-2	Aroclor-1221	12000	U
11141-16-5	Aroclor-1232	12000	U
53469-21-9	Aroclor-1242	12000	U
12672-29-6	Aroclor-1248	12000	U
11097-69-1	Aroclor-1254	24000	U
11096-82-5	Aroclor-1260	24000	U

DEL 6/4/91

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7-30-91
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ORGANIC QC - Holding Times

Name C.J. Simuel Date 7-31-91

COMMENTS: VOA- analysis performed 7, 9, and 12 days after sampling

BNA- extraction performed 5 days after sampling, analysis performed 34 and 38 days after extraction

PCB- extraction performed 5 days after sampling for B00V48, B00V49, B00V50, B00V51, analysis performed 30 days after extraction. extraction performed 12 days after sampling for sample B00J39, analysis performed 24 days after extraction

ACTION: Action: Qualify all associated samples as per OSM guidelines.

sample #	constituent	value/qual	sample #	constituent	value/qual
B00J39	All Constituents	UJ			

ORGANIC QC - Surrogate Recovery

Name C.J. Simpiel Date 7-31-91

COMMENTS: VOA- 7 out of 10 surrogates diluted out due to high dilution factor to ~~[illegible]~~ lower CJS 7-30-91 concentration of non target compounds, remaining 3 surrogate % recoveries were in required control limits

BNA- ~~[illegible]~~ surrogate CJS 7-30-91 % recoveries ~~and PPD's~~ CJS 7-30-91 are all within required control limits.

PCB: all surrogate recoveries are within required control limits

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

ORGANIC QC - MS/MSD

Name G. Samuel Date 7-31-91

COMMENTS: VOA- MS/MSD % recoveries and RPD's are all within required control limits.
BNA- MS/MSD % recoveries and RPD's are all within required control limits.
PCB- all MS/MSD % recoveries and RPD's are within required control limits

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

ORGANIC QC - Blanks

Name CJ Simiele Date 7-31-91

COMMENTS: VOA-common lab contaminants (methylene chloride - 1400ug/kg, and acetone 2800ug/kg) were detected in blanks, blank frequency not met
BNA-no contaminants detected in blank
PCB- no contaminants detected in blanks, blank frequency not.

ACTION: Qualify all associated samples as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
>VOA - all sample results are >10x concentration found in blank - no qualification					

ORGANIC QC - GC/MS Tune

Name CJ Simiele Date 7-31-91

COMMENTS: VOA-BFB % relative abundance criteria met, tune frequency met
BNA-DFTPP % relative abundance criteria met, tune frequency met

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

ORGANIC QC - Calibrations

Name CJ Simely Date 7-31-91

COMMENTS: VOA- Initial and continuing calibration on all with un required control limits, calibration frequency met.
BNA- Initial and continuing calibration are all with un required control limits, calibration frequency met
PCB- Initial calibration linearity out of control limits for Aldrin, analytical sequence requirements met, All
ACTION: Continuing calibration %D are with un required limits
Action: PCB- Qualify all associated samples as per OSH guidelines.

sample #	constituent	value/qual
B00V48	All Constituents	UJ
B00V49	All Constituents	UJ
B00V50	All Constituents	UJ
B00V51	All Constituents	UJ

sample #	constituent	value/qual

ORGANIC QC - Internal Standards

Name CJ Simiele Date 7-31-91

COMMENTS: VOA - internal standard area counts and retention times are all within required control limits
BNA - internal standard area counts and retention times are all within required control limits

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

ORGANIC QC - Instrument Performance (pest)

Name CJ Simiele Date 7-31-91

COMMENTS: All DDT and other retention times are within specified criteria. DDT and Endrin % breakdown are within control limits. DBC %D's are all within required control limits for samples in SDG.

ACTION: None

sample #	constituent	value/qual	sample #	constituent	value/qual

ORGANIC QC - Other

Name CJ Simiele Date 7-31-91

COMMENTS: None

ACTION: N/A

sample #	constituent	value/qual	sample #	constituent	value/qual