9102L669-WBS-006 120 2

WESTON Task #W91-0001

Custody Transfer Record/Lab Work Request

WESTON

WESTON Analytics Use Only
9102L669

Client: Westinghouse Hanford/Geosciences
Work Order: 6168-02-01
Date Rec'd. 2/22/91 Date Due 3/29/91
RFW Contact: Peg Beaty
Client Contact/Phone: B.H. Ford 509-376-6465

Refrigerator#									
#/Type Container	3/G	2/G	1/P	1/P	1/P	3/P	see	below	
Volume	40mL	2L	1L	1L	1L	4L			
Preservative	---	---	NaOH	HNO3	HNO3	HNO3			
ANALYSES REQUESTED	** See Additional Information Below **								
	1	2X	3	4	5	6	7/8	9/10	11/12

WA Use Only Lab ID	Client ID/Description	Matrix	Date Collected	1	2X	3	4	5	6	7/8	9/10	11/12
1	B00F02	W	20Feb91	✓	✓	✓				✓	✓	
2	B00F03	W	20Feb91					✓				
	B00	W										
	** Additional Information **											
	1. CLP-VOA											
	2. CLP-SEMI/PEST/PCB											
	3. CLP-CN											
	4. CLP-METAL UNFILTERED Bi, Sr, Sn											
	5. CLP-METAL FILTERED Bi, Sr, Sn											
	6. GROSS ALPHA, GROSS BETA, Radium, Sr-90, Tc-90, Cs-137, Co-60, Pu-238, Pu-239/240											
	7. TOTAL URANIUM, 1, P, 1L, HCl											
	8. Tritium, 1, G, 250 mL, No preserve											
	9. TOC, 1, G, 250 mL, H2SO4											
	10. Anions, SO4, Alkalinity, pH, Cond., TDS, 2, P, 1L, No preserve											
	11. NO2/NO3, Ammonia, Hardness, 1, P, 1L, H2SO4											

Revision 7 4/14/91 Radiochem subbed to Teledyne

Revision 2 Subbed (RD) Radiochem to Teledyne

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

Special Instructions: Full CLP 35 DAY TAT

Item/Reason	Relinquished by	Received by	Date	Time	Item/Reason	Relinquished by	Received by	Date	Time
Fill	Emery	B. Shaffer	2-22-91	11:00	STD	B. Shaffer	[illegible]	3/20/91	10:15
RADSCRN	B. Shaffer	Charles Pyen	2-22-91	2:00	STD	[illegible]	B. Shaffer	3/20/91	10:15
STORAGE	Charles Pyen	B. Shaffer	2-22-91	4:00	Details	Angel	L. Young	3/21	4:00
	Peggy	TV Johnson	2-25-91						
Analysis - 01	Peggy	F. Tiger		10:00					
Analysis - 01	F. Tiger	Peggy	10:00						

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

Property Control # W91-0-0145 #7

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: See attached
Thermometer Hold

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: B. Shaffer 2-22-91

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

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

7-115

START 07-3-12.0515

0046088

DEC 1996 RECEIVED

HESTON Task #W91-0001

Custody Transfer Record/Lab Work Request

WESTON

WESTON Analytics Use Only
91021669

Client: Westinghouse Hanford/Geosciences
Work Order: 6168-02-01
Date Rec'd.: 2/22/91 Date Due: 3/29/91
RFW Contact: Peg Beaty
Client Contact/Phone: B. H. Ford 509-376-6465

Refrigerator#										
#/Type Container			3/G	2/G	1/P	1/P	1/P	3/P	see	below
Volume			40mL	2L	1L	1L	1L	4L		
Preservative			---	---	NaOH	HNO3	HNO3	HNO3		
ANALYSES REQUESTED			**	See Additional Information Below						**
			1	2	3	4	5	6	7/8	9/10	11/12
WA Use Only Lab ID	Client ID/Description	Matrix	Date Collected		SEE BELOW					
3	B00 D2-9 RAD	W	20Feb91	✓	✓	✓	✓		✓	✓	✓	✓
4	B00 F00 RAD	W	20Feb91					✓				
5	B00 F15 RAD	W	20Feb91	✓								
	** Additional Information **											
	1. CLP-VOA											
	2. CLP-SEMI/PEST/PCB											
	3. CLP-CN											
	4. CLP-METAL UNFILTERED Bi, Sr, Sn											
	5. CLP-METAL FILTERED Bi, Sr, Sn											
	6. GROSS ALPHA, GROSS BETA, Radium, Sr-90, Cs-137, Co-60, Pu-238, Pu-239/240, Tc-90											
	7. TOTAL URANIUM, 1, P, 1L, HCl											
	8. Tritium, 1, G, 250 mL, No preserve											
	9. TOC, 1, G, 250 mL, H2SO4											
	10. Anions, SO4, Alkalinity, pH, Cond., TDS, 2, P, 1L, No preserve											
	11. NO2/NO3, Ammonia, Hardness, 1, P, 1L, H2SO4											

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

Special Instructions:

Item/Reason	Relinquished by	Received by	Date	Time	Item/Reason	Relinquished by	Received by	Date	Time
VOA	[illegible]	[illegible]	2/25/91	1.00	metals	[illegible]	[illegible]	3/6	[illegible]
U3N2	[illegible]	[illegible]	2/26/91	8:30	TOC		[illegible]	3/18/91	1600
SO4	[illegible]	[illegible]	3/6/91	11:20	TOC storage	[illegible]		3/20/91	0830
VOA	[illegible]	[illegible]	3/7/91	2:30	metals	[illegible]	Anas	3/21/91	4:00
NH3	[illegible]	[illegible]	3/8	8:30	SPC	[illegible]		3/26/91	
Pb, Rn	[illegible]								

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

Property Control# W91-0-0145 #7
[illegible] 281.453910 T

7-115

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:

9713512.0516

9413512.0517

VOLATILE ORGANICS ANALYSIS SHEET

0000017

CLIENT SAMPLE NO.

B00F02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-001

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W022807

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 02/28/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

9213512.0518

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000018

CLIENT SAMPLE NO.

BOOF02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-001

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W022807

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 02/28/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

9713512.0519

1A

VOLATILE ORGANICS ANALYSIS SHEET

0000024

CLIENT SAMPLE NO.

BOODZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-003

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W030111

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 03/01/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

9113512.0520

0000025

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOODZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-003

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W030111

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 03/01/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	20.47	10	JB

9243512.0521

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

0000035

BOOF15

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-005

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W022808

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 02/28/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

9213512.0522

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0 0 0 0 0 3 6

CLIENT SAMPLE NO.

BOOF15

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-005

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W022808

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 02/28/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

9713512.0523

VOLATILE ORGANICS ANALYSIS SHEET

0000102

CLIENT SAMPLE NO.

VBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LVW024-MB1

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W022806

Level: (low/med) LOW

Date Received: 02/28/91

% Moisture: not dec. _____

Date Analyzed: 02/28/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	12	
67-64-1	Acetone	24	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

9213512.0524

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000103

CLIENT SAMPLE NO.

VBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LVW024-MB1

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W022806

Level: (low/med) LOW

Date Received: 02/28/91

% Moisture: not dec. _____

Date Analyzed: 02/28/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

9213512.0525

VOLATILE ORGANICS ANALYSIS SHEET

0000111

CLIENT SAMPLE NO.

VBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LVW025-MB1

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W030110

Level: (low/med) LOW

Date Received: 03/01/91

% Moisture: not dec. _____

Date Analyzed: 03/01/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	
67-64-1	Acetone	24	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

9113512.0526

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000112

CLIENT SAMPLE NO.

VBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LVW025-MB1

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W030110

Level: (low/med) LOW

Date Received: 03/01/91

% Moisture: not dec. _____

Date Analyzed: 03/01/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

9713512.0527

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000026

CLIENT SAMPLE NO.

B00F02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L669-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: V031916

Level: (low/med) LOW Date Received: 02/22/91

% Moisture: not dec. _____ dec. Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/19/91

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

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

CAS NO.	COMPOUND		
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

9713512.0528

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000027

CLIENT SAMPLE NO.

B00F02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-001

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V031916

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/19/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	1	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9713512.0529

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000028

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOF02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-001

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V031916

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/19/91

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

Dilution Factor: 1.00

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	TRICHLOROPROPENE	7.93	6	J
2.	UNKNOWN	12.03	8	J
3.	HYDROCARBON	25.10	8	J

9713512.0530

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000041

CLIENT SAMPLE NO.

BOODZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L669-003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: V032219

Level: (low/med) LOW Date Received: 02/22/91

% Moisture: not dec. _____ dec. Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/23/91

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

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

CAS NO.	COMPOUND		
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

9713512.0531

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000042

CLIENT SAMPLE NO.

BOODZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-003

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V032219

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/23/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	1	JB
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9713512.0532

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000043

CLIENT SAMPLE NO.

BOODZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-003

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V032219

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/23/91

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

Dilution Factor: 1.00

Number TICs found: 18

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	METHYL CYCLOPENTANOL	6.73	50	JB
2.	UNKNOWN	8.42	40	JB
3.	TRIETHYLENE GLYCOL	13.63	20	JB
4.	UNKNOWN	18.75	4	JB
5.	HYDROCARBON	21.95	20	JB
6.	HYDROCARBON	22.80	6	JB
7.	HYDROCARBON	22.98	10	JB
8.	UNKNOWN	25.10	500	JB
9.	UNKNOWN	25.30	50	JB
10.	UNKNOWN	28.05	20	JB
11.	UNKNOWN	28.23	80	JB
12.	UNKNOWN	30.63	50	JB
13.	UNKNOWN	30.92	100	JB
14.	UNKNOWN	33.97	60	JB
15.	UNKNOWN	34.47	50	JB
16.	HYDROCARBON	38.52	40	JB
17.	UNKNOWN	39.13	20	JB
18.	HYDROCARBON	44.03	20	J

9713512.0535

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000272

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0242-MB1 BS

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S031803

Level: (low/med) LOW

Date Received: 02/25/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/18/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol		S
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol		S
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene		S
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine		S
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene		S
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol		S
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

S: SPIKE COMPOUND

FORM 1 SV-1

12/88 Rev.

9713512.0534

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000273

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0242-MB1 BS

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S031803

Level: (low/med) LOW

Date Received: 02/25/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/18/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene		S
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol		S
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene		S
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		S
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene		S
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

S: SPIKE COMPOUND

FORM 1 SV-2

12/88 Rev.

9213512.0535

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000280

CLIENT SAMPLE NO.

SBLKMSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0242-MB1 BSD

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S031804

Level: (low/med) LOW

Date Received: 02/25/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/18/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol		S
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol		S
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene		S
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine		S
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene		S
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol		S
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

S: SPIKE COMPOUND

FORM 1 SV-1

12/88 Rev.

9113512.0536

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000281

CLIENT SAMPLE NO.

SBLKMSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0242-MB1 BSD

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: S031804

Level: (low/med) LOW

Date Received: 02/25/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/18/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene		S
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol		S
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene		S
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		S
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene		S
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

S: SPIKE COMPOUND

FORM 1 SV-2

12/88 Rev.

9713512.0537

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000288

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0265-MB1

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V032214

Level: (low/med) LOW

Date Received: 02/27/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/22/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

9713512.0538

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000289

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0265-MB1

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V032214

Level: (low/med) LOW

Date Received: 02/27/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/22/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	2	J
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9713512.0539

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000029

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0265-MB1

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V032214

Level: (low/med) LOW

Date Received: 02/27/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/22/91

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

Dilution Factor: 1.00

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	METHYLCYCLOPENTANOL	6.75	200	J
2.	UNKNOWN	8.42	50	J
3.	TRIETHYLENE GLYCOL	13.63	30	JB
4.	UNKNOWN	18.73	5	J
5.	UNKNOWN	21.93	60	J
6.	HYDROCARBON	22.80	30	J
7.	HYDROCARBON	22.98	40	J
8.	HYDROCARBON	24.42	20	J
9.	HYDROCARBON	25.13	1000	J
10.	UNKNOWN	25.32	100	J
11.	HYDROCARBON	27.23	80	J
12.	UNKNOWN	28.05	60	J
13.	UNKNOWN	28.23	60	J
14.	UNKNOWN	30.63	50	J
15.	UNKNOWN	30.90	100	J
16.	UNKNOWN	33.97	50	J
17.	UNKNOWN	34.47	100	J
18.	HYDROCARBON	38.53	50	J
19.	UNKNOWN	39.15	30	J
20.	UNKNOWN	40.03	60	J

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 91LE0265-MB1 BS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: V032215

Level: (low/med) LOW Date Received: 02/27/91

% Moisture: not dec. _____ dec. Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/22/91

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

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

CAS NO.	COMPOUND		
108-95-2	Phenol		S
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol		S
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene		S
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine		S
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene		S
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol		S
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

S: SPIKE COMPOUND

9713512.0541

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000326

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 91LE0265-MB1 BS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: V032215

Level: (low/med) LOW Date Received: 02/27/91

% Moisture: not dec. _____ dec. Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/22/91

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

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene		S
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol		S
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene		S
84-66-2	Diethylphthalate	2	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	1	JB
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		S
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	3	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene		S
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	JB
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

S: SPIKE COMPOUND

9713512.0542

ID

PESTICIDE ORGANICS ANALYSIS SHEET 0 0 0 0 1 7 7

CLIENT SAMPLE NO.

B00F02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L669-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 04049103.21

Level: (low/med) LOW Date Received: 02/22/91

% Moisture: not dec. _____ dec. Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/05/91

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

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.050	U
319-85-7	Beta-BHC	0.050	U
319-86-8	Delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JEB 5/15/91

9103512.0543

PESTICIDE ORGANICS ANALYSIS SHEET 0000183

CLIENT SAMPLE NO.

B00DZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-003

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 04049103.51

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 04/05/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.050	U
319-85-7	Beta-BHC	0.050	U
319-86-8	Delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.090	J
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9713512.0544

10 0000190

PESTICIDE/PCB IDENTIFICATION

CLIENT SAMPLE NO.

B00DZ9

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

Client: WESTINGHOUSE HANFORD

GC Column ID (1): 2250/2401 GC Column ID (2): SP2100

Instrument ID (1): 03 Instrument ID (2): 04

Lab Sample ID: 9102L669-003 GC Sample ID: 04049104.51

Lab File ID: _____ (only if confirmed by GCMS)

PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 4,4'-DDT	Column 1 12.00	11.89	12.17	Y	N
02	Column 2 12.54	12.34	12.54	N	N

Comments:

FORM X PEST

01/89 Rev.

PESTICIDE ORGANICS ANALYSIS SHEET 0000305

CLIENT SAMPLE NO.

PBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0245-MB1

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 04049103.13

Level: (low/med) LOW

Date Received: 02/25/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/05/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.050	U
319-85-7	Beta-BHC	0.050	U
319-86-8	Delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9713512.0546

1D

PESTICIDE ORGANICS ANALYSIS SHEET 000031

CLIENT SAMPLE NO.

PBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0245-MB1 BS

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 04049103.14

Level: (low/med) LOW

Date Received: 02/25/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/05/91

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

Dilution Factor: 2.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.10	U
319-85-7	Beta-BHC	0.10	U
319-86-8	Delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)		S
76-44-8	Heptachlor		S
309-00-2	Aldrin		S
1024-57-3	Heptachlor epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin		S
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin		S
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT		S
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin ketone	0.20	U
5103-71-9	alpha-Chlordane	1.0	U
5103-74-2	gamma-Chlordane	1.0	U
8001-35-2	Toxaphene	2.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

S: SPIKE COMPOUND

FORM 1 PEST

12/88 Rev.

PESTICIDE ORGANICS ANALYSIS SHEET 000317

CLIENT SAMPLE NO.

PBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0266-MB1

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 04049103.48

Level: (low/med) LOW

Date Received: 02/27/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 04/05/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.050	U
319-85-7	Beta-BHC	0.050	U
319-86-8	Delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.50	U
5103-74-2	gamma-Chlordane	0.50	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.50	U
11104-28-2	Aroclor-1221	0.50	U
11141-16-5	Aroclor-1232	0.50	U
53469-21-9	Aroclor-1242	0.50	U
12672-29-6	Aroclor-1248	0.50	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

9716512.0548

PESTICIDE ORGANICS ANALYSIS SHEET 0000323

CLIENT SAMPLE NO.

PBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0266-MB1 BS

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 04049103.49

Level: (low/med) LOW

Date Received: 02/27/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 04/05/91

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

Dilution Factor: 2.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.10	U
319-85-7	Beta-BHC	0.10	U
319-86-8	Delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)		S
76-44-8	Heptachlor		S
309-00-2	Aldrin		S
1024-57-3	Heptachlor epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin		S
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin		S
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT		S
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin ketone	0.20	U
5103-71-9	alpha-Chlordane	1.0	U
5103-74-2	gamma-Chlordane	1.0	U
8001-35-2	Toxaphene	2.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

S: SPIKE COMPOUND

FORM 1 PEST

12/88 Rev.

9213512.0549

PESTICIDE ORGANICS ANALYSIS SHEET 0000328

CLIENT SAMPLE NO.

PBLKMSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0266-MB1 BSD

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: 04049103.50

Level: (low/med) LOW

Date Received: 02/27/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 04/05/91

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

Dilution Factor: 2.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.10	U
319-85-7	Beta-BHC	0.10	U
319-86-8	Delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)		S
76-44-8	Heptachlor		S
309-00-2	Aldrin		S
1024-57-3	Heptachlor epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin		S
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin		S
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT		S
72-43-5	Methoxychlor	1.0	U
53494-70-5	Endrin ketone	0.20	U
5103-71-9	alpha-Chlordane	1.0	U
5103-74-2	gamma-Chlordane	1.0	U
8001-35-2	Toxaphene	2.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	1.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	2.0	U
11096-82-5	Aroclor-1260	2.0	U

S: SPIKE COMPOUND

FORM 1 PEST-

12/88 Rev.

9713512.0550

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOOF02	Alkalinity	102	MG/L	2.0
		Chloride by IC	5.5	MG/L	0.25
		Fluoride by IC	1.1	MG/L	0.50
		Nitrite by IC	0.25 u	MG/L	0.25
		Nitrate by IC	67.1	MG/L	2.5
		Cyanide, Total	31.5	UG/L	10.0
		Phosphate by IC	0.25 u	MG/L	0.25
		Sulfate by IC	36.8	MG/L	2.5
		Hardness	124	MG/L	2.0
		Nitrate Nitrite	10.1	MG/L	1.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	1.0	MG/L	0.50
		pH	7.9	PH UNITS	0.10
		Sulfate	36.7	MG/L	5.0
		Specific Conductance	398	UMHOS/CM	1.0
		Total Dissolved Solids	290	MG/L	5.0
-003	BOODZ9	Alkalinity	58.0	MG/L	2.0
		Chloride by IC	54.0	MG/L	2.5
		Fluoride by IC	5.0 u	MG/L	5.0
		Nitrite by IC	2.5 u	MG/L	2.5
		Nitrate by IC	690	MG/L	25.0
		Cyanide, Total	1030	UG/L	125
		Phosphate by IC	2.5 u	MG/L	2.5
		Sulfate by IC	522	MG/L	25.0
		Hardness	1070	MG/L	4.0
		Nitrate Nitrite	38.6	MG/L	10.0
		Ammonia, as N	0.26	MG/L	0.10
		Total Organic Carbon	3.8	MG/L	1.0
		pH	7.7	PH UNITS	0.10
		Sulfate	484	MG/L	100
		Specific Conductance	1100	UMHOS/CM	1.0
		Total Dissolved Solids	2080	MG/L	5.0

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
BLANK10	91LAL003-MB1	Alkalinity	0.60	MG/L	0.50
BLANK20	91LAL003-MB2	Alkalinity	0.60	MG/L	0.50
BLANK30	91LAL003-MB3	Alkalinity	1.2	MG/L	0.50
BLANK40	91LAL003-MB4	Alkalinity	1.2	MG/L	0.50
BLANK1	91LIC08-MB1	Chloride by IC	0.25 u	MG/L	0.25
		Fluoride by IC	0.50 u	MG/L	0.50
		Nitrite by IC	0.25 u	MG/L	0.25
		Nitrate by IC	0.25 u	MG/L	0.25
		Phosphate by IC	0.25 u	MG/L	0.25
		Sulfate by IC	0.25 u	MG/L	0.25
BLANK1	91LC072-MB1	Cyanide, Total	10.0 u	UG/L	10.0
BLANK10	91LHD004-MB1	Hardness	1.0 u	MG/L	1.0
BLANK20	91LHD004-MB2	Hardness	1.0 u	MG/L	1.0
BLANK30	91LHD004-MB3	Hardness	1.0 u	MG/L	1.0
BLANK10	91LNO089-MB1	Nitrate Nitrite	0.10 u	MG/L	0.10

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
BLANK20	91LNO089-MB2	Nitrate Nitrite	0.10 u	MG/L	0.10
BLANK30	91LNO089-MB3	Nitrate Nitrite	0.10 u	MG/L	0.10
BLANK40	91LNO089-MB4	Nitrate Nitrite	0.10 u	MG/L	0.10
BLANK10	91LAM019-MB1	Ammonia, as N	0.10 u	MG/L	0.10
BLANK20	91LAM019-MB2	Ammonia, as N	0.10 u	MG/L	0.10
BLANK30	91LAM019-MB3	Ammonia, as N	0.10 u	MG/L	0.10
BLANK40	91LAM019-MB4	Ammonia, as N	0.10 u	MG/L	0.10
BLANK10	91LTC049-MB1	Total Organic Carbon	0.50 u	MG/L	0.50
BLANK20	91LTC049-MB2	Total Organic Carbon	0.50 u	MG/L	0.50
BLANK10	91LS4015-MB1	Sulfate	5.0 u	MG/L	5.0

9713512.0553

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK20	91LS4015-MB2	Sulfate	5.0	u	MG/L	5.0
BLANK30	91LS4015-MB3	Sulfate	5.0	u	MG/L	5.0
BLANK10	91LSP012-MB1	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK20	91LSP012-MB2	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK30	91LSP012-MB3	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK40	91LSP012-MB4	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK50	91LSP012-MB5	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK60	91LSP012-MB6	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK10	91LSS014-MB1	Total Dissolved Solids	5.0	u	MG/L	5.0
BLANK10	91LAL006-MB1	Alkalinity	0.50	u	MG/L	0.50

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK20	91LAL006-MB2	Alkalinity	0.50	u	MG/L	0.50
BLANK30	91LAL006-MB3	Alkalinity	2.0	u	MG/L	2.0
BLANK40	91LAL006-MB4	Alkalinity	2.0	u	MG/L	2.0
BLANK50	91LAL006-MB5	Alkalinity	2.0	u	MG/L	2.0
BLANK2	91LC081-MB2	Cyanide, Total	10.0	u	UG/L	10.0
BLANK10	91LHD005-MB1	Hardness	1.0	u	MG/L	1.0
BLANK20	91LHD005-MB2	Hardness	1.0	u	MG/L	1.0
BLANK10	91LNO105-MB1	Nitrate Nitrite	0.10	u	MG/L	0.10
BLANK10	91LAM033-MB1	Ammonia, as N	0.10	u	MG/L	0.10
BLANK20	91LAM033-MB2	Ammonia, as N	0.10	u	MG/L	0.10

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK30	91LAM033-MB3	Ammonia, as N	0.10	u	MG/L	0.10
BLANK10	91LTC051-MB1	Total Organic Carbon	0.50	u	MG/L	0.50
BLANK20	91LTC051-MB2	Total Organic Carbon	0.50	u	MG/L	0.50
BLANK30	91LTC051-MB3	Total Organic Carbon	0.50	u	MG/L	0.50
BLANK10	91LS4018-MB1	Sulfate	5.0	u	MG/L	5.0
BLANK20	91LS4018-MB2	Sulfate	5.0	u	MG/L	5.0
BLANK30	91LS4018-MB3	Sulfate	5.0	u	MG/L	5.0
BLANK10	91LSP028-MB1	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK20	91LSP028-MB2	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK30	91LSP028-MB3	Specific Conductance	1.0	u	UMHOS/CM	1.0

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK40	91LSP028-MB4	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK50	91LSP028-MB5	Specific Conductance	1.0	u	UMHOS/CM	1.0

9713512.0557

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/05/91

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

WESTON BATCH #: 91021669

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
-003	BOODZ9	Nitrate Nitrite	134	38.6	100	95.1
		Nitrate Nitrite MSD	133	38.6	100	94.6
		Ammonia, as N	1.2	0.26	1.0	96.1
		Total Organic Carbon	13.1	3.8	10.0	93.7
		Total Organic Carbon	13.3	3.8	10.0	95.7
BLANK10	91LAL003-MB1	Alkalinity	100	0.60	100	99.4
BLANK20	91LAL003-MB2	Alkalinity	98.0	0.60	100	97.4
BLANK30	91LAL003-MB3	Alkalinity	98.0	1.2	100	96.8
BLANK40	91LAL003-MB4	Alkalinity	90.0	1.2	100	88.8
BLANK10	91LHD004-MB1	Hardness	100	1.0 u	100	100
BLANK20	91LHD004-MB2	Hardness	100	1.0 u	100	100
		Hardness MSD	70.5	1.0 u	70.5	100
BLANK30	91LHD004-MB3	Hardness	102	1.0 u	100	102
BLANK10	91LNO089-MB1	Nitrate Nitrite	0.42	0.10u	0.40	104
BLANK20	91LNO089-MB2	Nitrate Nitrite	1.0	0.10u	1.0	102

9713512.0558

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK30	91LNO089-MB3	Nitrate Nitrite	0.40	0.10u	0.40	99.8
BLANK40	91LNO089-MB4	Nitrate Nitrite	0.39	0.10u	0.40	97.8
BLANK10	91LAM019-MB1	Ammonia, as N	0.19	0.10u	0.20	97.0
		Ammonia, as N MSD	1.9	0.10u	2.0	94.5
BLANK20	91LAM019-MB2	Ammonia, as N	1.9	0.10u	2.0	93.5
		Ammonia, as N MSD	1.9	0.10u	2.0	94.5
BLANK30	91LAM019-MB3	Ammonia, as N	1.9	0.10u	2.0	95.0
		Ammonia, as N MSD	9.9	0.10u	10.0	99.1
BLANK40	91LAM019-MB4	Ammonia, as N	10.4	0.10u	10.0	104
		Ammonia, as N MSD	0.20	0.10u	0.20	98.[illegible]
BLANK10	91LTC049-MB1	Total Organic Carbon	5.0	0.50u	5.0	101
		Total Organic Carbon	4.9	0.50u	5.0	98.7
BLANK20	91LTC049-MB2	Total Organic Carbon	4.6	0.50u	5.0	92.7
BLANK10	91LS4015-MB1	Sulfate	20.9	5.0 u	20.0	104
		Sulfate	20.7	5.0 u	20.0	103
BLANK20	91LS4015-MB2	Sulfate	20.6	5.0 u	20.0	103

9713512.0559

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/05/91

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9102L669

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK30	91LS4015-MB3	Sulfate	20.4	5.0 u	20.0	102
BLANK10	91LSP012-MB1	Specific Conductance	138	1.0 u	147	93.9
BLANK20	91LSP012-MB2	Specific Conductance	692	1.0 u	718	96.4
BLANK30	91LSP012-MB3	Specific Conductance	1400	1.0 u	1410	99.0
BLANK40	91LSP012-MB4	Specific Conductance	1400	1.0 u	1410	99.4
BLANK50	91LSP012-MB5	Specific Conductance	695	1.0 u	718	96.8
BLANK60	91LSP012-MB6	Specific Conductance	139	1.0 u	147	94.7
BLANK10	91LAL006-MB1	Alkalinity	100	0.50u	100	100
BLANK20	91LAL006-MB2	Alkalinity	100	0.50u	100	100
BLANK30	91LAL006-MB3	Alkalinity	100	2.0 u	100	100

9713512.0560

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/05/91

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

WESTON BATCH #: 3102L669

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK40	91LAL006-MB4	Alkalinity	100	2.0 u	100	100
BLANK50	91LAL006-MB5	Alkalinity	96.0	2.0 u	100	96.0
BLANK10	91LHD005-MB1	Hardness	99.0	1.0 u	100	99.0
		Hardness MSD	69.2	1.0 u	70.5	98.2
BLANK20	91LHD005-MB2	Hardness	100	1.0 u	100	100
BLANK10	91LNO105-MB1	Nitrate Nitrite	0.43	0.10u	0.40	108
		Nitrate Nitrite MSD	0.38	0.10u	0.40	95.2
BLANK10	91LAM033-MB1	Ammonia, as N	9.6	0.10u	10.0	96.5
		Ammonia, as N MSD	0.20	0.10u	0.20	99.5
BLANK20	91LAM033-MB2	Ammonia, as N	2.0	0.10u	2.0	99.0
		Ammonia, as N MSD	0.19	0.10u	0.20	96.0
BLANK30	91LAM033-MB3	Ammonia, as N	10.1	0.10u	10.0	101
BLANK10	91LTC051-MB1	Total Organic Carbon	4.7	0.50u	5.0	93.5
		Total Organic Carbon	4.8	0.50u	5.0	95.5
BLANK20	91LTC051-MB2	Total Organic Carbon	4.5	0.50u	5.0	89.5

9713512.0561

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK30	91LTC051-MB3	Total Organic Carbon	4.5	0.50u	5.0	89.5
BLANK10	91LS4018-MB1	Sulfate	20.8	5.0 u	20.0	104
		Sulfate	20.9	5.0 u	20.0	105
BLANK20	91LS4018-MB2	Sulfate	20.5	5.0 u	20.0	103
BLANK30	91LS4018-MB3	Sulfate	20.3	5.0 u	20.0	102
BLANK10	91LSP028-MB1	Specific Conductance	141	1.0 u	147	95.9
BLANK20	91LSP028-MB2	Specific Conductance	698	1.0 u	718	97.2
BLANK30	91LSP028-MB3	Specific Conductance	1400	1.0 u	1410	99.4
BLANK40	91LSP028-MB4	Specific Conductance	140	1.0 u	147	95.2
BLANK50	91LSP028-MB5	Specific Conductance	699	1.0 u	718	97.4

9713512.0562

ROY F. WESTON INC.

INORGANICS DUPLICATE SPIKE REPORT 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
-003	BOODZ9	Nitrate Nitrite	95.1	94.6	0.50
		Total Organic Carbon	93.7	95.7	2.1
LCS2	91LC072-LC2	Cyanide, Total LCS	98.3	99.2	0.91
BLANK20	91LHD004-MB2	Hardness	100	100	0.30
BLANK10	91LAM019-MB1	Ammonia, as N	97.0	94.5	2.6
BLANK20	91LAM019-MB2	Ammonia, as N	93.5	94.5	1.1
BLANK30	91LAM019-MB3	Ammonia, as N	95.0	99.1	4.2
BLANK40	91LAM019-MB4	Ammonia, as N	104	98.5	5.4
BLANK10	91LTC049-MB1	Total Organic Carbon	101	98.7	2.0
BLANK10	91LS4015-MB1	Sulfate	104	103	1.1
BLANK10	91LHD005-MB1	Hardness	99.0	98.2	0.90

9713512.0563

ROY F. WESTON INC.

INORGANICS DUPLICATE SPIKE REPORT 04/05/91

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

WESTON BATCH # 2102L669

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
BLANK10	91LNO105-MB1	Nitrate Nitrite	108	95.2	12.9
BLANK10	91LAM033-MB1	Ammonia, as N	96.5	99.5	3.1
BLANK20	91LAM033-MB2	Ammonia, as N	99.0	96.0	3.1
BLANK10	91LTC051-MB1	Total Organic Carbon	93.5	95.5	2.1
BLANK10	91LS4018-MB1	Sulfate	104	105	0.30

9713512.0564

ROY F. WESTON INC.

INORGANICS PRECISION REPORT 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-001REP	BOOF02	Total Dissolved Solids	290	291	0.34
-003REP	BOODZ9	Nitrate Nitrite	38.6	38.0	1.6
		Ammonia, as N	0.26	0.26	0.39
		Total Organic Carbon	3.8	3.6	5.5

9713512.0565

ROY F. WESTON INC.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 04/05/91

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	91LC072-LC1	Cyanide, Total LCS	98.3	100	UG/L	98.3
LCS2	91LC072-LC2	Cyanide, Total LCS	99.2	100	UG/L	99.2
LCS3	91LC081-LC3	Cyanide, Total LCS	93.9	100	UG/L	93.9
LCS4	91LC081-LC4	Cyanide, Total LCS	93.0	100	UG/L	93.0

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF02

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP669

Matrix (soil/water):WATER Lab Sample ID:9102669001

Level (low/med): LOW Date Received:02/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	7.10	B		F
7440-39-3	Barium	20.90	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	39967.40			P
7440-47-3	Chromium	12.10			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	128.20			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	12767.00			P
7439-96-5	Manganese	3.50	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6250.00			P
7782-49-2	Selenium	1.10	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	35083.60			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	77.70			P
7440-66-6	Zinc	10.50	B		P
	Cyanide	31.52			C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF03

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP669

Matrix (soil/water):WATER Lab Sample ID:9102669002

Level (low/med): LOW Date Received:02/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	7.80	B		F
7440-39-3	Barium	24.30	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	36349.20			P
7440-47-3	Chromium	9.80	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	11699.80			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6270.80			P
7782-49-2	Selenium	1.40	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	32582.90			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	76.10			P
7440-66-6	Zinc	15.50	B		P
	Cyanide				NR

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOODZ9

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP669

Matrix (soil/water):WATER Lab Sample ID:9102669003

Level (low/med): LOW Date Received:02/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	3.80	B	W	F
7440-39-3	Barium	85.50	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32634.30			P
7440-47-3	Chromium	10.70			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	977.40			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	79269.00			P
7439-96-5	Manganese	11.10	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	618.70			P
7440-09-7	Potassium	17800.00			A
7782-49-2	Selenium	61.00			F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	51780.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	22.40	B		P
7440-66-6	Zinc	13.80	B		P
	Cyanide	164.30			C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFOO

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP669

Matrix (soil/water):WATER Lab Sample ID:9102669004

Level (low/med): LOW Date Received:02/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	103.60	B		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	2.90	B		F
7440-39-3	Barium	99.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	31217.10			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	405.90			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	77822.00			P
7439-96-5	Manganese	10.10	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	590.50			P
7440-09-7	Potassium	16800.00			A
7782-49-2	Selenium	32.60		S	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	49500.00	B		P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	6.10	B		P
	Cyanide				NR

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF02

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP669

Matrix (soil/water): WATER Lab Sample ID: 910266901

Level (low/med): LOW Date Received: 2/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	24.10	B		P
7440-38-2	Arsenic	7.10	B	S	F
7440-39-3	Barium	30.40	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	40000.00			P
7440-47-3	Chromium	12.10			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	128.00			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	12800.00			P
7439-96-5	Manganese	3.50	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6250.00			P
7782-49-2	Selenium	1.10	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	35100.00			P
7440-28-0	Thallium	50.00	U	E	F
7440-62-2	Vanadium	77.70			P
7440-66-6	Zinc	10.50	B		P
	Cyanide	31.50			C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF03

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP669

Matrix (soil/water): WATER Lab Sample ID: 910266902

Level (low/med): LOW Date Received: 2/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	42.90	B		P
7440-38-2	Arsenic	7.80	B	W	F
7440-39-3	Barium	27.70	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	36300.00			P
7440-47-3	Chromium	9.80	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	11700.00			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6270.00			P
7782-49-2	Selenium	1.40	B	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	32600.00			P
7440-28-0	Thallium	50.00	U	E	F
7440-62-2	Vanadium	76.10			P
7440-66-6	Zinc	15.50	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOODZ9

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP669

Matrix (soil/water): WATER Lab Sample ID: 910266903

Level (low/med): LOW Date Received: 2/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	90.00	B		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	3.80	B	W	F
7440-39-3	Barium	85.50	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32600.00			P
7440-47-3	Chromium	10.70			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	977.00			P
7439-92-1	Lead	20.00	U		F
7439-95-4	Magnesium	94440.00			P
7439-96-5	Manganese	11.10	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	619.00			P
7440-09-7	Potassium	17800.00			P
7782-49-2	Selenium	61.00		W	F
7440-22-4	Silver	6.20	B		P
7440-23-5	Sodium	51800.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	22.40	B		P
7440-66-6	Zinc	13.80	B		P
	Cyanide	164.30			C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFOO

Lab Name: ROY F. WESTON, INC - L372 Contract: 6168-02-01

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP669

Matrix (soil/water): WATER Lab Sample ID: 910266904

Level (low/med): LOW Date Received: 2/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	603.00			P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	2.90	B		F
7440-39-3	Barium	99.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	31200.00			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	406.00			P
7439-92-1	Lead	20.00	U		F
7439-95-4	Magnesium	89900.00			P
7439-96-5	Manganese	10.10	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	590.00			P
7440-09-7	Potassium	16800.00			P
7782-49-2	Selenium	33.00		S	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	49500.00	B		P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	6.10	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9713512.0574

Westinghouse Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 7/8/91

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

RFW # 91021669

SAMPLES/MATRIX B00F02 both water

B00D29

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Alkalinity	Anions IC[1]	Hardness
1. Holding Time		X	X	O
2. Method Blank		X	O	O
3. Spike Recovery		O	X	O
4. Duplicate		~~NE~~ O jf 7/8	O	O
5.				
6.				
7.				
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: no major problems - all results acceptable w/attached qualifiers

NOTES: disregard all CN results reported in this package - to be reported and validated in CLP format

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

[1] Anions include: chloride, nitrate, nitrite, phosphate, fluoride, sulfate

9113512.0575

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (cont pg 2)

DATE 7/8/91

SAMPLES/MATRIX See Cover

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

RFW # 91021469

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	NO_2/NO_3	Ammonia	TOC
1. Holding time		O	O	X
2. Method Blank		O	O	O
3. Spike Recovery		O	O	O
4. Duplicates		O	O	O
5.				
6.				
7.				
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: See Cover

NOTES: See Cover

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

9715512.0576

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (cont pg 3)

DATE 7/8/91

SAMPLES/MATRIX See Cover

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

RFW # 91022669

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Sulfate	Conductance	TDS
1. Holding time		X	O	O
2. Method Blank		O	O	O
3. Spike Recovery		O	O	N/A
4. Duplicates		O	O	O
5.				
6.				
7.				
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: See Cover

NOTES: See Cover

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

RCRA LEVEL C QC

Name JA Lerch Date 7/8/91

QC Check: Holding time

COMMENTS: Anions - nitrate, nitrite, phosphate hold time (48 hrs) exceeded
Alkalinity - holding time (14 day) exceeded for B00DZ9, ok for B00F02
Sulfate, TOC - 28 day hold time exceeded for B00DZ9; ok for B00F02
NO_2/NO_3, Ammonia, conductance - 28 day hold time met for both samples
~~ACTION:~~ hardness, TDS - no hold time specified; samples analyzed within 20 days
Action: qualify associated results as per QSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	nitrite	UJ			
	nitrate	J			
	phosphate	UJ			
B00DZ9	sulfate	J			
	TOC	J			
	alkalinity	J			

RCRA LEVEL C QC

Name JA Lerch Date 7/8/91

QC Check: Method Blank

COMMENTS: Alkalinity – trace contamination present (91LAL003-MB1 thru MB4)
Anions – method blank results ok (91LIC08-MB1)
Hardness – all method blank results ok (91LHD004-MB1 thru MB3)
NO_2/NO_3 – all method blank results ok (91LN0089-MB1 thru MB4)

ACTION: qualify associated results as per QSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	alkalinity	acceptable			

RCRA LEVEL C QC

Name JA Lerch Date 7/8/91

QC Check: Method Blank

COMMENTS: Ammonia - all method blank results ok (91LAM019-MB1 thru MB4)
TOC - all method blank results ok (91LTC049-MB1 + MB2)
Sulfate - all method blank results ok (91LS4015-MB1 thru MB3)
Conductance - all method blank results ok (91LSP012-MB1 thru MB6)
~~ACTION:~~ TDS - method blank result ok (91LSS014-MB1)

Action: None

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

RCRA LEVEL C QC

Name JA Lerch Date 7/8/91

QC Check: Spike Recovery

COMMENTS: NO_2/NO_3, Ammonia, TOC – all matrix spike recoveries within limits (BOODE9)
Alkalinity, Hardness, NO_2/NO_3, Ammonia, TOC, sulfate, Conductance, – all blank spike recoveries ok
Associated QC from RFW# 91021772 – Anions – all matrix spike recoveries low
~~ACTION:~~ for sample BOODY9 (see CASE NARRITIVE)
Action – qualify associated sample results as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	anions	J, UJ			

RCRA LEVEL C QC

Name JA Lerch Date 7/8/91

QC Check: Duplicate

COMMENTS: NO_2/NO_3, TOC, MS/MSD RPD's ok (B00DZ9)

NO_2/NO_3, Hardness, Ammonia, TOC, Sulfate - all blank spike/blank spike dup RPD's ok

TDS, ~~NO_2/NO_3~~, - replicate RPD ok (B00F02)

NO_2/NO_3, ammonia, TOC - replicate RPDs ok (B00DZ9)

~~ACTION:~~ ~~AOAC~~ Associated QC from RFW91B21722 - Aions - replicate RPD's ok (B00DY9), Alkalinity and Conductance - RPD's ok (B00DY6)

Action: none

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

9713512.0582

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/05/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOOF02	Alkalinity	102	MG/L	2.0
		Chloride by IC	5.5 J	MG/L	0.25
		Fluoride by IC	1.1 J	MG/L	0.50
		Nitrite by IC	0.25 uJ	MG/L	0.25
		Nitrate by IC	67.1 J	MG/L	2.5
		~~Cyanide, Total~~	31.5	UG/L	10.0
		Phosphate by IC	0.25 uJ	MG/L	0.25
		Sulfate by IC	36.8 J	MG/L	2.5
		Hardness	124	MG/L	2.0
		Nitrate Nitrite	10.1	MG/L	1.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	1.0	MG/L	0.50
		pH	7.9	PH UNITS	0.10
		Sulfate	36.7	MG/L	5.0
		Specific Conductance	398	UMHOS/CM	1.0
		Total Dissolved Solids	290	MG/L	5.0
-003	BOODZ9	Alkalinity	58.0 J	MG/L	2.0
		Chloride by IC	54.0 J	MG/L	2.5
		Fluoride by IC	5.0 uJ	MG/L	5.0
		Nitrite by IC	2.5 uJ	MG/L	2.5
		Nitrate by IC	690 J	MG/L	25.0
		~~Cyanide, Total~~	1030	UG/L	125
		Phosphate by IC	2.5 uJ	MG/L	2.5
		Sulfate by IC	522 J	MG/L	25.0
		Hardness	1070	MG/L	4.0
		Nitrate Nitrite	38.6	MG/L	10.0
		Ammonia, as N	0.26	MG/L	0.10
		Total Organic Carbon	3.8 J	MG/L	1.0
		pH	7.7	PH UNITS	0.10
		Sulfate	484 J	MG/L	100
		Specific Conductance	1100	UMHOS/CM	1.0
		Total Dissolved Solids	2080	MG/L	5.0

7/8/91

9713512.0583

OSM ORGANIC DATA ASSESSMENT

LKT

DATE 8.5.91

REVIEWED BY LK THOMPSON

LABORATORY WESTON

CASE #

SDG # 91021669

SAMPLES/MATRIX	B00F02	B00D29	B00F15
WATER			

DATA ASSESSMENT SUMMARY

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

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: MS/MSD OF BLANK WATER COULDN'T FIND PENTACHLOROPHENOL 50% OF TIME R CODE PENTACHLOROPHENOL IN SAMPLES B00F02 and B00D29.

NOTES : (1) B00F15 — VOA ONLY

(2) MS/MSD - NOT PERFORMED THEY DID BS/BSD. FOR VOA, BNA, NOR PEST

Refer to the corresponding attachments for explanation of any problems.

9713512.0584

ORGANIC QC - Holding Times

Name LOREN K. THOMPSON (LKT) Date 8.5.91

COMMENTS: VOA- ALL HT REQUIREMENT MET

BNA- ALL HT REQUIREMENT WITHIN TIME REQUIREMENTS

PEST- ALL HT REQUIREMENT WITHIN TIME REQUIREMENTS

ACTION: VOA-none

BNA-NONE

PEST-NONE

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

9713512.0585

ORGANIC QC - Surrogate Recovery

Name LK THOMPSON (LKT) Date 8.5.91

COMMENTS: VOA - BLANK VBLKLV W025-MB1 HAD ONE SURROGATE OUTSIDE QC LIMIT. LAB REANALYZED ANOTHER BLANK VBLKLVW025-MB2 WAS WITHIN QC LIMITS. THE DATA WERE LOST FOR THIS REANALYSIS. CONCLUSIONS - THIS WAS AN ISOLATED PROBLEM AND DOES NOT EFFECT SAMPLE DATA.

BNA - ONE SURROGATE #54 WAS HIGH AND OUTSIDE QC LIMIT FOR SAMPLE B00279. NO ACTION TAKEN

PEST - ALL SURR RECOVERIES WITHIN EPA QC LIMITS

ACTION: VOA - NONE

BNA - NONE

PEST - NONE

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

9716512.0586

ORGANIC QC - MS/MSD

LK

Name LK THOMPSON Date 8.5.91

COMMENTS: VOA - ALL MS/MSD %REC + %RPD WITHIN QC LIMITS BUT FORM III VOA-I HAS NO CORRESPONDING QUAN REPORTS/CHROM.

BNA - LAB DID NOT PERFORM MATRIX SPIKE ASSAY THEY PERFORMED BLANK SPIKE ASSAY. TWO BS/BSD WERE PERFORMED WHICH HAD 2 and 7 BLANK SPIKE RECOVERIES OUT AND 3 and 1 RPDs OUTSIDE LIMITS. TWICE FAILED TO QUANTITATE PENTACHLOROPHENOL.

ACTION: VOA-NONE BUT CONTACT LAB FOR MISSING MS/MSD DATA

BNA - FLAG PENTACHLOROPHENOL WITH R FOR ALL SAMPLES.

PEST - endrin BS/BSD recoveries high; all RPD's ok, should not effect data quality

sample #	constituent	value/qual
B00F02	PENTACHLOROPHENOL	50 R
B00DZ9	PENTACHLOROPHENOL	50R

* note: problem w/pentachlorophenol likely due to error during spiking procedure

JJ 10/5/91

9713512.0587

LKT

ORGANIC QC - Blanks

Name LK THOMPSON Date 8.5.91

COMMENTS: VOA - METHOD BLANK SUMMARIES OK : VBLK (91LVW024-MB1) HAD Methylene chloride & ACETONE BUT NO TICS : VBLK (91LVW025-MB1) HAD methylene Chloride & ACETONE BUT NO TICS : VBLK (91LVW025-MB2) THIS REANALYSIS HAD Methylene Chloride & ACETONE NO TICS REPORTED BUT PEAK AT 614 SCANS PRESENT. DATA LOST FOR THIS BLANK REANALYSIS

BNA VBLK (91LE0242-MB1) HAD Di-n-BUTY-PHTHALATE. FLUORANTHENE & PYRENE & BIS-(2-ETHYLHEXYL)PHTHALATE ALL BELOW CRQL AND QUETIC AT 10 ppb @ 19.82 min

ACTION: VOA - QUALIFY ASSOCIATED DATA BY OSM GUIDELINES.

BNA - QUALIFY ASSOCIATED DATA VIA OSM GUIDELINES

BNA BLANK VBLK (91LE0265-MB1) HAD DI-N-BUTYLPHTHALATE BIS(2-ETHYLHEXYL)PHTHALATE ALL BELOW CRQL 20 TICS WERE REPORTED IN THIS BLANK. ALSO ON CRQ. A PEAK AT 2639 SCANS WAS ASSOCIATED WITH THE BLANK AND THE SAMPLE B00D79 TIC REMOVED DUE TO BLANK RULE.

PEST NO ~~ANALYTES~~ (TCL) WERE FOUND IN THE BLANKS

sample #	constituent	value/qual
B00F02	Methylene Chloride	20U
B00D79	Methylene Chloride	5U
	ACETONE	10U
	TIC AT 614 SCAN (20.47 min) SAME AS BLANK ∴ ELIMINATED DUE TO BLANK CRITERIA RULE	
B00F15	METHYLENE CHLORIDE	8U
	ACETONE	10U
B00F02	Di-n-Butylphthalate	10U
B00D79	N-nitroso Diphenylamine	10U
	Di-n-BUTYL PHTHALATE	10U

VOA

9713542.0588

ORGANIC QC - GC/MS Tune

LH

Name LK THOMPSON Date 8.5.91

COMMENTS: VOA- ALL TUNE / MASS CALIBRATION CRITERIA MET

BNA- ALL TUNE / MASS CALIBRATION CRITERIA MET

Pest- N/A

ACTION: none

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

ORGANIC QC - Calibrations

Name LK THOMPSON LKT Date 8.15.91

COMMENTS: VOA: ALL INITIAL & CONTINUING CALIBRATION - OK
BNA: ALL INITIAL & CONTINUING CALIBRATIONS - OK
PEST: 72 HOUR SEQUENCE - OK
LINEARITY CHECK OK
CONTINUING CALIBRATION %D END IN >15%
IN QUANT COLUMN

ACTION: QUALIFY DATA V/A OSM GUIDELINES.

sample #	constituent	value/qual
B00F02	ALL PESTICIDE ANALYTES	VALUE/UJ
B00D79	ALL PESTICIDE ANALYTES ~~FELLOW DOT~~	VALUE/UJ

sample #	constituent	value/qual

10/5/91

9713512.0590

ORGANIC QC - Internal Standards

Name LK THOMPSON LH Date 8-E-91

COMMENTS: VOA — ALL IS AREAS W/IN LIMITS EXCEPT FOR 1ST VBLK WITH IS2 OUT BUT 2nd VBLK OK. RT SHIFTS OK.

BNA - ALL IS AREAS WITHIN LIMITS.

ALL RT WITHIN LIMITS.

ACTION: VOA - NONE

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

9713512.0591

ORGANIC QC - Instrument Performance (pest)

Name LK THOMPSON Date 8.5.91

COMMENTS: - DDT RT > 12 min

- RT TIME WINDOWS FOR ALL ANALYTES = ALL OK

- TOTAL % BREAKDOWN DDT/ENDRIN <20%

RBC RT %D ALL WITHIN QC LIMITS

ACTION: NONE

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

9713512.0592

ORGANIC QC - Other

Name L K THOMPSON LKT Date 8.5.91

COMMENTS: NONE

ACTION: NONE

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

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000017

CLIENT SAMPLE NO.

BOOF02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L669-001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: W022807

Level: (low/med) LOW Date Received: 02/22/91

% Moisture: not dec. _____ Date Analyzed: 02/28/91

Column: (pack/cap) PACK Dilution Factor: 1.00

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

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

LRT 8.5.91

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000018

CLIENT SAMPLE NO.

BOOF02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-001

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W022807

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 02/28/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

1A

VOLATILE ORGANICS ANALYSIS SHEET

0000024

CLIENT SAMPLE NO.

BOODZ9

Lab Name: Roy F. Weston, Inc. Work Order: 5168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-003

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W030111

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 03/01/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

LCT 8.5.91

1E

0000025

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOODZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-003

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W030111

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 03/01/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
~~1.~~	~~UNKNOWN~~	~~20.47~~	~~10~~	~~JB~~

LCT
8.5.91

1A
VOLATILE ORGANICS ANALYSIS SHEET

0000035

CLIENT SAMPLE NO.

BOOF15

Lab Name: Roy F. Weston, Inc. Work Order: 5168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-005

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W022808

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 02/28/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

LRT
8.5.91

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0 0 0 0 0 3 6

CLIENT SAMPLE NO.

BOOF15

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-005

Sample wt/vol: 5.00 (g/mL) ML

Lab File ID: W022808

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____

Date Analyzed: 02/28/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				

9713512.0599

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000041

CLIENT SAMPLE NO.

BOODZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L669-003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: V032219

Level: (low/med) LOW Date Received: 02/22/91

% Moisture: not dec. _____ dec. Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/23/91

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

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

CAS NO.	COMPOUND		
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

9713512.0600

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000042

CLIENT SAMPLE NO.

BOODZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L669-003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: V032219

Level: (low/med) LOW Date Received: 02/22/91

% Moisture: not dec. _____ dec. Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/23/91

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

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	~~2~~ 10	~~JB~~ R
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	~~U~~ R
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	~~2~~ 10	~~JB~~ R
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

LKT 8.5.91

(1) - Cannot be separated from Diphenylamine

9213512.0601

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

D000043

CLIENT SAMPLE NO.

BOODZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-003

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V032219

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/23/91

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

Dilution Factor: 1.00

Number TICs found: 18

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	~~METHYL CYCLOPENTANOL~~	~~6.73~~	~~50~~	~~JB~~
2.	~~UNKNOWN~~	~~8.42~~	~~40~~	~~JB~~
3.	~~TRIETHYLENE GLYCOL~~	~~13.63~~	~~20~~	~~JB~~
4.	~~UNKNOWN~~	~~18.75~~	~~4~~	~~JB~~
5.	~~HYDROCARBON~~	~~21.95~~	~~20~~	~~JB~~
6.	~~HYDROCARBON~~	~~22.80~~	~~6~~	~~JB~~
7.	~~HYDROCARBON~~	~~22.98~~	~~10~~	~~JB~~
8.	~~UNKNOWN~~	~~25.10~~	~~500~~	~~JB~~
9.	~~UNKNOWN~~	~~25.30~~	~~50~~	~~JB~~
10.	~~UNKNOWN~~	~~28.05~~	~~20~~	~~JB~~
11.	~~UNKNOWN~~	~~28.23~~	~~80~~	~~JB~~
12.	~~UNKNOWN~~	~~30.63~~	~~50~~	~~JB~~
13.	~~UNKNOWN~~	~~30.92~~	~~100~~	~~JB~~
14.	~~UNKNOWN~~	~~33.97~~	~~60~~	~~JB~~
15.	~~UNKNOWN~~	~~34.47~~	~~50~~	~~JB~~
16.	~~HYDROCARBON~~	~~38.52~~	~~40~~	~~JB~~
17.	~~UNKNOWN~~	~~39.13~~	~~20~~	~~JB~~
18.	~~HYDROCARBON~~	~~44.03~~	~~20~~	~~J~~

LKT 4.5.91

9713512.0602

1B
SEMIVOLATILE ORGANICS ANALYSIS SHEET 000026

CLIENT SAMPLE NO.

B00F02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-001

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V031916

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/19/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

9113512.0603

1C
SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000027

CLIENT SAMPLE NO.

B00F02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L669-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: V031916

Level: (low/med) LOW Date Received: 02/22/91

% Moisture: not dec. _____ dec. Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/19/91

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

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	~~U~~ R
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	~~1~~ 10	~~JB~~ U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

LKT 8.5.91

LKT 8.5.91

(1) - Cannot be separated from Diphenylamine

9213512.0604

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000028

CLIENT SAMPLE NO.

BOOF02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L669-001

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: V031916

Level: (low/med) LOW

Date Received: 02/22/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 03/19/91

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

Dilution Factor: 1.00

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	TRICHLOROPROPENE	7.93	6	J
2.	UNKNOWN	12.03	8	J
3.	HYDROCARBON	25.10	8	J

9103512.0605

1D

PESTICIDE ORGANICS ANALYSIS SHEET 0000183

CLIENT SAMPLE NO.

B00DZ9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L669-003

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 04049103.51

Level: (low/med) LOW Date Received: 02/22/91

% Moisture: not dec. _____ dec. Date Extracted: 02/27/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 04/05/91

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

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.050	U UJ
319-85-7	Beta-BHC	0.050	U UJ
319-86-8	Delta-BHC	0.050	U UJ
58-89-9	gamma-BHC (Lindane)	0.050	U UJ
76-44-8	Heptachlor	0.050	U UJ
309-00-2	Aldrin	0.050	U UJ
1024-57-3	Heptachlor epoxide	0.050	U UJ
959-98-8	Endosulfan I	0.050	U UJ
60-57-1	Dieldrin	0.10	U UJ
72-55-9	4,4'-DDE	0.10	U UJ
72-20-8	Endrin	0.10	U UJ
33213-65-9	Endosulfan II	0.10	U UJ
72-54-8	4,4'-DDD	0.10	U UJ
1031-07-8	Endosulfan sulfate	0.10	U UJ
50-29-3	4,4'-DDT	0.090	J
72-43-5	Methoxychlor	0.50	U UJ
53494-70-5	Endrin ketone	0.10	U UJ
5103-71-9	alpha-Chlordane	0.50	U UJ
5103-74-2	gamma-Chlordane	0.50	U UJ
8001-35-2	Toxaphene	1.0	U UJ
12674-11-2	Aroclor-1016	0.50	U UJ
11104-28-2	Aroclor-1221	0.50	U UJ
11141-16-5	Aroclor-1232	0.50	U UJ
53469-21-9	Aroclor-1242	0.50	U UJ
12672-29-6	Aroclor-1248	0.50	U UJ
11097-69-1	Aroclor-1254	1.0	U UJ
11096-82-5	Aroclor-1260	1.0	U UJ

LKI 8.5.91

FORM 1 PEST 12/88 Rev.

9713512.0606

ID

PESTICIDE ORGANICS ANALYSIS SHEET 0 0 0 0 1 7 7

CLIENT SAMPLE NO.

B00F02

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L669-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 04049103.21

Level: (low/med) LOW Date Received: 02/22/91

% Moisture: not dec. _____ dec. Date Extracted: 02/25/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/05/91

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
319-84-6	Alpha-BHC	0.050	U UJ
319-85-7	Beta-BHC	0.050	U UJ
319-86-8	Delta-BHC	0.050	U UJ
58-89-9	gamma-BHC (Lindane)	0.050	U UJ
76-44-8	Heptachlor	0.050	U UJ
309-00-2	Aldrin	0.050	U UJ
1024-57-3	Heptachlor epoxide	0.050	U UJ
959-98-8	Endosulfan I	0.050	U UJ
60-57-1	Dieldrin	0.10	U UJ
72-55-9	4,4'-DDE	0.10	U UJ
72-20-8	Endrin	0.10	U UJ
33213-65-9	Endosulfan II	0.10	U UJ
72-54-8	4,4'-DDD	0.10	U UJ
1031-07-8	Endosulfan sulfate	0.10	U UJ
50-29-3	4,4'-DDT	0.10	U UJ
72-43-5	Methoxychlor	0.50	U UJ
53494-70-5	Endrin ketone	0.10	U UJ
5103-71-9	alpha-Chlordane	0.50	U UJ
5103-74-2	gamma-Chlordane	0.50	U UJ
8001-35-2	Toxaphene	1.0	U UJ
12674-11-2	Aroclor-1016	0.50	U UJ
11104-28-2	Aroclor-1221	0.50	U UJ
11141-16-5	Aroclor-1232	0.50	U UJ
53469-21-9	Aroclor-1242	0.50	U UJ
12672-29-6	Aroclor-1248	0.50	U UJ
11097-69-1	Aroclor-1254	1.0	U UJ
11096-82-5	Aroclor-1260	1.0	U UJ

JEB 5/15/91

LKE 8/5/91

FORM 1 PEST 12/88 Rev.

9213512.0607

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 11/9/91

REVIEWED BY JA Lerch

LABORATORY Weston

~~CASE #~~ RFW# 91026669

SDG # N/A

SAMPLES/MATRIX B00F02

B00F03

B00D29

B00F00

all water

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS ICP(Bi, Sn, Sr)
1. Holding time	O
2. Blanks	O
3. Spike Recovery	O
4. Duplicates	O
5. LCS	O
6.	
7.	
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: no problems – all results acceptable

NOTES: See CLP report for TAL results, case Narrative etc. disregard all other results reported w/this pckg.

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

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: Holding Time

COMMENTS: - 6 mo holding time met for Bi, Sr, Sn

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch Jf Date 11/9/91

QC Check: Blanks

COMMENTS: -all method blanks free of contamination

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch JL Date 11/9/91

QC Check: Spike Recovery

COMMENTS: - no MS results reported
- Sr, Sn LCS spike & spike dup recoveries within limits
- other 200-BP-1 samples have shown no problems

ACTION: none

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

9213512.0611

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: Duplicates

COMMENTS: Sr, Sn LCS spike + spike dup %D ok
- no replicate analysis reported - other 200-BP-1
samples have shown no problems

ACTION: none

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

9713542.0612

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: LCS

COMMENTS: - all Bi, Sn, Sr LCS recoveries ok

ACTION: none

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

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 07/11/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	BOOF02	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	11.4		UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	150	u	UG/L	150
		Calcium, Total	40000		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	12.1		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	128		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	6250		UG/L	5000
		Magnesium, Total	12800		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	35100		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	3.0	u	UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	5.0	u	UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	100	u	UG/L	100
		Thallium, Total	100	u	UG/L	100
		Vanadium, Total	77.7		UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 07/11/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	BOOF03	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.0	u	UG/L	10.0
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	150	u	UG/L	150
		Calcium, Soluble	36300		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	6270		UG/L	5000
		Magnesium, Soluble	11700		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	32600		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.0
		Lead, Soluble	3.0	u	UG/L	3.0
		Antimony, Soluble	60.0	u	UG/L	60.0
		Selenium, Soluble	5.0	u	UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	100	u	UG/L	100
		Thallium, Soluble	100	u	UG/L	100
		Vanadium, Soluble	76.1		UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 07/11/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-003	BOODZ9	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	200	u	UG/L	200
		Calcium, Total	32600		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	10.7		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	977		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	17800		UG/L	500
		Magnesium, Total	79300		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	51800		UG/L	50000
		Nickel, Total	619		UG/L	40.0
		Lead, Total	30.0	u	UG/L	30.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	61.0		UG/L	50.0
		Tin, Total	284		UG/L	100
		Strontium, Total	1320		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 07/11/91

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

WESTON BATCH #: 9102L669

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	BOOFOO	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.0	u	UG/L	10.0
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	200	u	UG/L	200
		Calcium, Soluble	31200		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	406		UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	16800		UG/L	500
		Magnesium, Soluble	77800		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	50000	u	UG/L	50000
		Nickel, Soluble	590		UG/L	40.0
		Lead, Soluble	30.0	u	UG/L	30.0
		Antimony, Soluble	60.0	u	UG/L	60.0
		Selenium, Soluble	32.6		UG/L	5.0
		Tin, Soluble	118		UG/L	100
		Strontium, Soluble	1420		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

OSM INORGANIC DATA ASSESSMENT

DATE 8.6.91

REVIEWED BY LK THOMPSON

LABORATORY WESTON

CASE # RFW 91021669

SDG # —

SAMPLES/MATRIX

	B00F02	B00F03	B00D79
HOT	B00F00		

DATA ASSESSMENT SUMMARY

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

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: MS/MSD DATA, DUPLICATE AND SERIAL DILUTIONS NOT CONTAINED IN THIS CASE BUT ASSOCIATED IN CASE RFW 91021658 - some results unacceptable (R) due to low ICS solution recoveries

~~NOTES:~~

Notes - none

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

- approved for transmittal

10/5/91

9713512.0618

INORGANIC QC - Calibrations

Name LK THOMPSON (LKT) Date 8.5.91

COMMENTS: → ALL INITIAL + CONTINUING CALIBRATION % RECOVERIES WITHIN QC LIMITS

→ ALL ANALYTICAL RUN SEQUENCES REQ MET

CN MIDPOINT STD OK; Hg CORRELATION >.999 OK

ACTION: CN CORRELATION COEFFICIENT MISSING

→ none

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

9213912.0619

INORGANIC QC - Blanks

Name LK THOMPSON LKT Date 8.5.91

COMMENTS: ~~Mg, Se, Na, V, Zn, AL Sb, al~~ LKT
al, Se, Ar, Ba, Ca, Cr, Mg, K, Se, Na, V, Zn
WERE DETECTED IN BLANKS (ALL WERE BELOW CRDL

ACTION: qualified data according to OSM protocol

sample #	constituent	value/qual
B00F02	As	7.10 U
	Ba	20.90 U
	~~Se~~	~~1.10 U~~
	Zn	10.50 U
B00F03	As	7.80 U
	Ba	24.30 U
	Cr	9.80 U
	~~Se~~	~~1.10 U~~
	Zn	15.50 U

sample #	constituent	value/qual
B00DZ9	~~As~~	~~3.80 U~~
	Ba	85.50 U
	V	22.40 U
	Zn	13.80 U
B00F00	~~al~~	~~103.6 U~~
	As	2.90 U
	Ba	99.60 U
	Zn	6.10 U

See CFAA FOR UJ FLAG

(see ICS FOR 'R' flag)

See MS/MSD FOR FURTHER QUALIFIER OF "UJ" FLAG FOR Se LKT

9713512.0620

INORGANIC QC - ICS

Name LK. THOMPSON Date 8.6.91

COMMENTS: → ICS RUN AT BEGINNING + END OF EACH SAMPLE RUN.

→ ALL INITIAL + FINAL % RECOVERIES WITHIN CONTROL LIMITS

EXCEPT (Co, Ag, Fe, Al, Mg, Ca) ← metal

(<50%, <20%, <2%, <1%, <11%; <12%) ← % R

ACTION: QUALIFY DATA AS PER OSM GUIDELINES

NO EVIDENCE OF NEGATIVE OR FOSI INTERFERENCE EXIST. POSITIVE

sample #	constituent	value/qual
B00F02	Co	4.0 R
	Ag	4.0 R
	Fe	128.2 R
	Al	77.0 R
	Mg	12767 R
	Ca	39967.4 R
B00F03	Co	4.0 R
	Ag	4.0 R
	Fe	37.0 R
	Al	77.0 R
	Mg	11699.8 R
	Ca	36349.2 R

sample #	constituent	value/qual
B00D29	Co	4.0 R
	Ag	4.0 R
	Fe	977.4 R
	Al	77.0 R
	Mg	76269.0 R
	Ca	32634.3 R
B00F00	Co	4.0 R
	Ag	4.0 R
	Fe	405.9 R
	Al	103.6 R
	Mg	77822 R
	Ca	31217.1 R

9715512.0621

INORGANIC QC - Matrix Spike

Name LK THOMPSON (LKT) Date 8.6.91

COMMENTS: MS/MSD DATA IN RFW# 9102L658
BOOF16 Hg % R WITHIN CONTROL LIMITS; BOOD22 CN % R WITHIN LIMITS; BOOD23 - all ICP % R WITHIN LIMITS
Pb + Se GFAA RECOVERIES LOW, ALL OTHER GFAA RECOVERIES OK

ACTION: QUALIFY ASSOCIATED RESULTS AS PER DSM GUIDELINES

sample #	constituent	value/qual
~~all~~ (LKT)	~~Pb~~	~~UJ~~
	~~Se~~	~~UJ~~
BOOF00	Pb	2.0 UJ
↓	Se	32.6 J
BOOF02	Pb	2.0 UJ
	Se	1.1 UJ
BOOF03	Pb	2.0 UJ
	Se	1.40 UJ
BOOD29	Pb	2.0 UJ
	Se	61.0 J

sample #	constituent	value/qual

9715512.0622

INORGANIC QC - Duplicate Analysis

Name L K THOMPSON Date 8.6.91

COMMENTS: DUPLICATE ANALYSIS PERFORMED ON A DIFFERENT RFW #9102L658

NO PROBLEMS IN ICP OR AA OR Hg OR CN

ACTION: NONE

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

9713512.0623

INORGANIC QC - LCS

Name LK THOMPSON LKT Date 8.6.91

COMMENTS: → ALL AQUEOUS LCS RECOVERIES WITHIN ACCEPTED CONTROL LIMITS

→ SOLID LCS N/A

ACTION: none

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

9713512.0624

INORGANIC QC - Serial Dilution

Name LK THOMPSON LKT Date 8.6.91

COMMENTS: SERIAL DILUTION NOT PERFORMED IN THIS CASE BUT CASE RFW G1026658 IN WHICH B00D73 had all dilution results WITHIN APPLICABLE CONTROL LIMITS

ACTION: NONE

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

9713512.0625

INORGANIC QC - Holding Times

Name LK THOMPSON Date 8.6.91

COMMENTS: ALL HOLDING TIMES WERE MET FOR METALS, Hg + CN

ACTION: none

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

INORGANIC QC - GFAA

Name LK THOMPSON Date 8.6.91

COMMENTS: → all GFAA analytical sequences requirements met
→ FORM XIV NOT PRESENT IN CASE
As % REC = 74 BELOW B00D29 91026669-003 ; all Pb % R < 85% ;
Se calculated by MSA B00F00 R_{corr} > .995 ; Tl % R < 85% FOR B00F02 B00F03

ACTION: QUALIFY ASSOCIATED SAMPLES AS PER OSM GUIDELINES.

sample #	constituent	value/qual
B00F02	Pb	2.0 UJ
B00F03	Pb	2.0 UJ
B00D29	Pb	2.0 UJ
B00F00	Pb	2.00 UJ
B00D29	As	3.8 UJ
B00F02	Tl	5.00 UJ
B00F03	Tl	5.00 UJ

sample #	constituent	value/qual

9715912.0627

INORGANIC QC - other

Name LK Thompson LKT Date 8.6.91

COMMENTS: none

ACTION: none

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

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BOOF02

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP669

Matrix (soil/water):WATER Lab Sample ID:9102669001

Level (low/med): LOW Date Received:02/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	~~U~~	R	P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	7.10	~~B~~	U	F
7440-39-3	Barium	20.90	~~B~~	U	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	39967.40		R	P
7440-47-3	Chromium	12.10			P
7440-48-4	Cobalt	4.00	~~U~~	R	P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	128.20		R	P
7439-92-1	Lead	2.00	~~B~~	W UJ	F
7439-95-4	Magnesium	12767.00		R	P
7439-96-5	Manganese	3.50	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6250.00			P
7782-49-2	Selenium	1.10	~~B~~	UJ	F
7440-22-4	Silver	4.00	~~U~~	R	P
7440-23-5	Sodium	35083.60			P
7440-28-0	Thallium	5.00	~~B~~	UJ	F
7440-62-2	Vanadium	77.70			P
7440-66-6	Zinc	10.50	~~B~~	U	P
	Cyanide	31.52			C

LH 8.6.91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF03

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP669

Matrix (soil/water):WATER Lab Sample ID:9102669002

Level (low/med): LOW Date Received:02/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	~~U~~	R	P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	7.80	~~B~~	U	F
7440-39-3	Barium	24.30	~~B~~	U	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	36349.20			P
7440-47-3	Chromium	9.80	~~B~~	U	P
7440-48-4	Cobalt	4.00	~~U~~	R	P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	~~U~~	R	P
7439-92-1	Lead	2.00	~~U~~	W UJ	F
7439-95-4	Magnesium	11699.80		R	P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6270.80			P
7782-49-2	Selenium	1.40	~~B~~	~~U~~ UJ	F
7440-22-4	Silver	4.00	~~U~~	R	P
7440-23-5	Sodium	32582.90			P
7440-28-0	Thallium	5.00	~~U~~	UJ	F
7440-62-2	Vanadium	76.10			P
7440-66-6	Zinc	15.50	~~B~~	U	P
	Cyanide				NR

UJ 8.6.91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOODZ9

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP669

Matrix (soil/water):WATER Lab Sample ID:9102669003

Level (low/med): LOW Date Received:02/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	~~U~~	R	P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	3.80	~~B~~	W UJ	F
7440-39-3	Barium	85.50	~~B~~	U	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32634.30			P
7440-47-3	Chromium	10.70			P
7440-48-4	Cobalt	4.00	~~U~~	R	P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	977.40		R	P
7439-92-1	Lead	2.00	~~U~~	W UJ	F
7439-95-4	Magnesium	79269.00			P
7439-96-5	Manganese	11.10	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	618.70			P
7440-09-7	Potassium	17800.00			A
7782-49-2	Selenium	61.00		J	F
7440-22-4	Silver	4.00	~~U~~	R	P
7440-23-5	Sodium	51780.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	22.40	~~B~~	U	P
7440-66-6	Zinc	13.80	~~B~~	U	P
	Cyanide	164.30			C

UJ 8.6.91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFOO

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP669

Matrix (soil/water):WATER Lab Sample ID:9102669004

Level (low/med): LOW Date Received:02/22/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	103.60	~~B~~	UR	P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	2.90	~~B~~	U	F
7440-39-3	Barium	99.60	~~B~~	U	P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	31217.10			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	~~B~~	R	P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	405.90		R	P
7439-92-1	Lead	2.00	~~B~~	UJ	F
7439-95-4	Magnesium	77822.00		R	P
7439-96-5	Manganese	10.10	B		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	590.50			P
7440-09-7	Potassium	16800.00			A
7782-49-2	Selenium	32.60		SJ	F
7440-22-4	Silver	4.00	~~B~~	R	P
7440-23-5	Sodium	49500.00	B		P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	6.10	~~B~~	U	P
	Cyanide				NR

LKT 8.6.91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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