9103L944

Custody Transfer Record/Lab Work Request

Page 1 of 1

Client	[redacted] Hanford
Est. Final Date	
Work Order	108-02-01-0000
Project	[redacted]
AD Project	[redacted] Scott Kinnan / Beaty
QC	Del RCP TAT Beaty
Date Rec'd	3/15/91 Date Due 4/19/91
Account #	WS-Hanford

Refrigerator #																				
#/Type Container	Liquid	2-VOA	1 qt	—		1P	—	1 qt	1 qt	1PE	1PE	1PE	1PE	1PE		
	Solid																			
Volume	Liquid	40 ml	2L	—		4L	—	1 qt	1 qt	1PE	1PE	1PE	1PE	1PE		
	Solid																			
Preservatives		—	—	—		HNO_3	—	HCL		HNO_3	NaOH	—	—	H_2SO_4		
ANALYSES REQUESTED		ORGANIC								INORG						
		VOA	BNA	Pest/PCB	Herb	BAD WORK	Tot Uranium	Tritium	TOC	Metal	CN	Anions	Inorg (1)	Inorg (2)		
		0624H	0625H	0608H		ISOB	ISOB	ISOB	ICIT	HSL+	ICIT	See Below	See Below	See Below		

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

Lab ID	Client ID/Description	Matrix QC Chosen (✓)	Matrix	Date Collected	VOA	BNA	Pest/PCB	Herb	BAD WORK	Tot Uranium	Tritium	TOC	Metal	CN	Anions	Inorg (1)	Inorg (2)
001	B00FC5		W	3/13/91	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
2	FC6												✓				
3	FF1				✓												
4	F85				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
5	F86												✓				

*RAD WORK = Gross Alpha, Beta, Radium, Sr90, Cs137, Tc99, Co-60, Pu238, Pu239/240

** Metals = HSL+BE, SB, SN

Special Instructions:

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

**** Anions (1) = PH, SPCN, ALKL, TDS, TSS

***** Anions (2) HARD, NH3, N-3, N-2

DATE/REVISIONS:

1.
2.
3.
4.
5.
6.

OCT 1996 RECEIVED

WESTON Analytics Use Only

Samples were:
1) Shipped ✓ or Hand Delivered
Airbill # 2426159TBC
2) Ambient or Chilled
3) Received In Good Condition Y or N
4) Properly Preserved Y or N
5) Received Within Holding Times Y or N

COC Tape was:
1) Present on Outer Package Y or N
2) Unbroken on Outer Package Y or N
3) Present on Sample Y or N
4) Unbroken on Sample Y or N
COC Record Present Upon Sample Rec't Y or N

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
Tomory	[signature]	3/15/91	1:36 Am	Charles Pope		3-15-91	3:40 PM
	Charles Pope	3-15-91	1:00 Pm				

Discrepancies Between Samples Labels and COC Record? Y or N
NOTES: Send filter

START

NFW 21-21-001/A-8/90 L372 L373 L375 L377 L378 Ref# Cooler# G77-5969

9613500.0834 1A

0000017 CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS SHEET

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: AK3K18

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ Date Analyzed: 03/20/91

Column: (pack/cap) CAP 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	19	B
67-64-1	Acetone	31	B
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

0000018

CLIENT SAMPLE NO.

B00FC5

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-001

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

Lab File ID: AK3K18

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

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.				

9613500.0836

1B

CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000023

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: M040714

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/07/91

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

9613500.0837

1c

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000024

CLIENT SAMPLE NO.

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: M040714

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/07/91

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	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613500.0838

1F

CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS 0000025

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-001

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M040714

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/07/91

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

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.				

9613500.0839

0000032

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00F85

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-004

Sample wt/vol: 990 (g/mL) ML Lab File ID: M041509

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/15/91

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

9613500.0840
1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000033

CLIENT SAMPLE NO.

B00F85

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-004

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M041509

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/15/91

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	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

9613500.0841

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000034

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00F85

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-004

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M041509

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/15/91

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

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.				

9613500.0842

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 9000253

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0368-MB1

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

Lab File ID: L040506

Level: (low/med) LOW

Date Received: 03/18/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

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		
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

9613500.0843

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000254

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0368-MB1

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

Lab File ID: L040506

Level: (low/med) LOW

Date Received: 03/18/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

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		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613500.0844

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000255

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0368-MB1

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

Lab File ID: L040506

Level: (low/med) LOW

Date Received: 03/18/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/05/91

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

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.				

9613500.0845
1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000262

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 91LE0368-MB1 BS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: L040908

Level: (low/med) LOW Date Received: 03/18/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/09/91

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

9613500.0846
1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000263

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 91LE0368-MB1 BS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: L040908

Level: (low/med) LOW Date Received: 03/18/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/09/91

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	10	U
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

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

SBLKMSD

Lab Name: Roy F. Weston, Inc. Work Order: NONE

Client: LAB

Matrix: WATER

Lab Sample ID: 91LE0368-MB1 BSD

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

Lab File ID: L040909

Level: (low/med) LOW

Date Received: 03/18/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/09/91

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

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000271

CLIENT SAMPLE NO.

SBLKMSD

Lab Name: Roy F. Weston, Inc. Work Order: NONE

Client: LAB

Matrix: WATER Lab Sample ID: 91LE0368-MB1 BSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: L040909

Level: (low/med) LOW Date Received: 03/18/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/09/91

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	10	U
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

9613500.0849

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000278

CLIENT SAMPLE NO.

B00FC5MS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001 MS

Sample wt/vol: 990 (g/mL) ML Lab File ID: M040715

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/07/91

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

9613500.0850

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000279

CLIENT SAMPLE NO.

B00FC5MS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001 MS

Sample wt/vol: 990 (g/mL) ML Lab File ID: M040715

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/07/91

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	10	U
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

9613500.0851

18

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000286

CLIENT SAMPLE NO.

B00FC5MSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001 MSD

Sample wt/vol: 990 (g/mL) ML Lab File ID: M040716

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/07/91

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

9613500.0852

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000287

CLIENT SAMPLE NO.

B00FC5MSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001 MSD

Sample wt/vol: 990 (g/mL) ML Lab File ID: M040716

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/07/91

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	10	U
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

9613500.0853

PESTICIDE ORGANICS ANALYSIS SHEET

0000011

CLIENT SAMPLE NO.

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-001

Sample wt/vol: 980 (g/mL) ML

Lab File ID: 04259103.48

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/26/91

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	0.051	U
319-85-7	Beta-BHC	0.051	U
319-86-8	Delta-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)	0.051	U
76-44-8	Heptachlor	0.051	U
309-00-2	Aldrin	0.051	U
1024-57-3	Heptachlor epoxide	0.051	U
959-98-8	Endosulfan I	0.051	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	0.51	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.51	U
5103-74-2	gamma-Chlordane	0.51	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.51	U
11104-28-2	Aroclor-1221	0.51	U
11141-16-5	Aroclor-1232	0.51	U
53469-21-9	Aroclor-1242	0.51	U
12672-29-6	Aroclor-1248	0.51	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JEB 6/27/91

9613500.0854

PESTICIDE ORGANICS ANALYSIS SHEET

0000016 CLIENT SAMPLE NO.

B00F85

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-004

Sample wt/vol: 900 (g/mL) ML Lab File ID: 04259103.49

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/26/91

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	0.056	U
319-85-7	Beta-BHC	0.056	U
319-86-8	Delta-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
1024-57-3	Heptachlor epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
60-57-1	Dieldrin	0.11	U
72-55-9	4,4'-DDE	0.11	U
72-20-8	Endrin	0.11	U
33213-65-9	Endosulfan II	0.11	U
72-54-8	4,4'-DDD	0.11	U
1031-07-8	Endosulfan sulfate	0.11	U
50-29-3	4,4'-DDT	0.11	U
72-43-5	Methoxychlor	0.56	U
53494-70-5	Endrin ketone	0.11	U
5103-71-9	alpha-Chlordane	0.56	U
5103-74-2	gamma-Chlordane	0.56	U
8001-35-2	Toxaphene	1.1	U
12674-11-2	Aroclor-1016	0.56	U
11104-28-2	Aroclor-1221	0.56	U
11141-16-5	Aroclor-1232	0.56	U
53469-21-9	Aroclor-1242	0.56	U
12672-29-6	Aroclor-1248	0.56	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U

9613500.0855

PESTICIDE ORGANICS ANALYSIS SHEET

0000144

CLIENT SAMPLE NO.

PBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0367-MB1

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

Lab File ID: 04259103.59

Level: (low/med) LOW

Date Received: 03/18/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/27/91

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

9613500.0856

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/18/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	B00FC5	Alkalinity	110	MG/L	2.0
		Chloride by IC	13.8	mg/L	0.50
		Fluoride by IC	1.0 u	mg/L	1.0
		Nitrite by IC	0.50 u	mg/L	0.50
		Nitrate by IC	31.7	mg/L	5.0
		Cyanide, Total	10.0 u	UG/L	10.0
		Phosphate by IC	0.50 u	mg/L	0.50
		Sulfate by IC	76.3	mg/L	5.0
		Hardness	154	MG/L	2.0
		Nitrate Nitrite	9.0	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.84	MG/L	0.50
		pH	6.8	PH UNITS	0.10
		Sulfate	74.2	MG/L	20.0
		Specific Conductance	445	UMHOS/CM	1.0
		Total Dissolved Solids	309	MG/L	5.0
-004	B00F85	Alkalinity	108	MG/L	2.0
		Chloride by IC	4.5	mg/L	0.25
		Fluoride by IC	0.62	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	10.2	mg/L	2.5
		Cyanide, Total	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 u	mg/L	0.25
		Sulfate by IC	19.6	mg/L	2.5
		Hardness	99.8	MG/L	1.0
		Nitrate Nitrite	2.6	MG/L	0.20
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.63	MG/L	0.50
		pH	7.9	PH UNITS	0.10
		Sulfate	18.3	MG/L	10.0
		Specific Conductance	278	UMHOS/CM	1.0
		Total Dissolved Solids	118	MG/L	5.0

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/18/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
BLANK10	91LAL007-MB1	Alkalinity	0.50 u	MG/L	0.50
BLANK20	91LAL007-MB2	Alkalinity	0.50 u	MG/L	0.50
BLANK30	91LAL007-MB3	Alkalinity	2.0 u	MG/L	2.0
BLANK40	91LAL007-MB4	Alkalinity	0.50 u	MG/L	0.50
BLANK1	91LIC14-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	91LC115-MB1	Cyanide, Total	10.0 u	UG/L	10.0
BLANK10	91LHD006-MB1	Hardness	1.0 u	MG/L	1.0
BLANK20	91LHD006-MB2	Hardness	1.0 u	MG/L	1.0
BLANK10	91LNO115-MB1	Nitrate Nitrite	0.10 u	MG/L	0.10
BLANK10	91LAM029-MB1	Ammonia, as N	0.10 u	MG/L	0.10

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/18/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
BLANK20	91LAM029-MB2	Ammonia, as N	0.10 u	MG/L	0.10
BLANK30	91LAM029-MB3	Ammonia, as N	0.10 u	MG/L	0.10
BLANK10	91LTC058-MB1	Total Organic Carbon	0.50 u	MG/L	0.50
BLANK10	91LS4021-MB1	Sulfate	5.0 u	MG/L	5.0
BLANK20	91LS4021-MB2	Sulfate	5.0 u	MG/L	5.0
BLANK10	91LSP021-MB1	Specific Conductance	1.0 u	UMHOS/CM	1.0
BLANK20	91LSP021-MB2	Specific Conductance	1.0 u	UMHOS/CM	1.0
BLANK30	91LSP021-MB3	Specific Conductance	1.0 u	UMHOS/CM	1.0
BLANK40	91LSP021-MB4	Specific Conductance	1.0 u	UMHOS/CM	1.0
BLANK50	91LSP021-MB5	Specific Conductance	1.0 u	UMHOS/CM	1.0

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/18/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK10	91LSS025-MB1	Total Dissolved Solids	5.0	u	MG/L	5.0
BLANK10	91LS4022-MB1	Sulfate	5.0	u	MG/L	5.0
BLANK20	91LS4022-MB2	Sulfate	5.0	u	MG/L	5.0

9613500.0860

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/18/91

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

WESTON BATCH #: D103L944

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
-004	B00F85	Ammonia, as N	0.98	0.10u	1.0	97.5
		Sulfate	59.9	18.3	40.0	104
BLANK10	91LAL007-MB1	Alkalinity	100	0.50u	100	100
BLANK20	91LAL007-MB2	Alkalinity	104	0.50u	100	104
BLANK30	91LAL007-MB3	Alkalinity	100	2.0 u	100	100
BLANK40	91LAL007-MB4	Alkalinity	100	0.50u	100	100
BLANK1	91LIC14-MB1	Chloride by IC	5.0	0.25u	5.0	100
		Fluoride by IC	10	0.50u	10.0	99.6
		Nitrite by IC	5.0	0.25u	5.0	99.7
		Nitrate by IC	4.9	0.25u	5.0	98.8
		Phosphate by IC	5.0	0.25u	5.0	99.3
		Sulfate by IC	5.0	0.25u	5.0	99.6
BLANK10	91LHD006-MB1	Hardness	100	1.0 u	100	100
		Hardness MSD	110	1.0 u	109	101
BLANK20	91LHD006-MB2	Hardness	100	1.0 u	100	100
BLANK10	91LNO115-MB1	Nitrate Nitrite	0.42	0.10u	0.40	106
		Nitrate Nitrite MSD	0.42	0.10u	0.40	106
BLANK10	91LAM029-MB1	Ammonia, as N	0.19	0.10u	0.20	97.0
		Ammonia, as N MSD	1.0	0.10u	1.0	102

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ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/18/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK20	91LAM029-MB2	Ammonia, as N	10.1	0.10u	10.0	101
BLANK30	91LAM029-MB3	Ammonia, as N	0.20	0.10u	0.20	98.0
		Ammonia, as N MSD	10.3	0.10u	10.0	103
BLANK10	91LTC058-MB1	Total Organic Carbon	4.6	0.50u	5.0	91.9
		Total Organic Carbon	4.9	0.50u	5.0	98.0
BLANK10	91LS4021-MB1	Sulfate	20.6	5.0 u	20.0	103
		Sulfate	20.9	5.0 u	20.0	104
BLANK20	91LS4021-MB2	Sulfate	31.8	5.0 u	30.0	106
BLANK10	91LSP021-MB1	Specific Conductance	143	1.0 u	147	97.3
BLANK20	91LSP021-MB2	Specific Conductance	696	1.0 u	718	97.0
BLANK30	91LSP021-MB3	Specific Conductance	1410	1.0 u	1410	99.8
BLANK40	91LSP021-MB4	Specific Conductance	694	1.0 u	718	96.7
BLANK50	91LSP021-MB5	Specific Conductance	143	1.0 u	147	97.3

9613500.0862

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/18/91

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

WESTON BATCH #: 9103L044

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	RECOVERY
BLANK10	91LS4022-MB1	Sulfate	20.5	5.0 u	20.0	102
		Sulfate	20.0	5.0 u	20.0	100
BLANK20	91LS4022-MB2	Sulfate	20.1	5.0 u	20.0	101

9613500.0863

ROY F. WESTON INC.

INORGANICS DUPLICATE SPIKE REPORT 04/18/91

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 5103L2-1

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
LCS2	91LC115-LC2	Cyanide, Total LCS	96.8	97.4	0.62
BLANK10	91LHD006-MB1	Hardness	100	101	0.90
BLANK10	91LNO115-MB1	Nitrate Nitrite	106	106	0.00
BLANK10	91LAM029-MB1	Ammonia, as N	97.0	102	5.0
BLANK30	91LAM029-MB3	Ammonia, as N	98.0	103	5.0
BLANK10	91LTC058-MB1	Total Organic Carbon	91.9	98.0	6.5
BLANK10	91LS4021-MB1	Sulfate	103	104	1.2
BLANK10	91LS4022-MB1	Sulfate	102	100	2.4

9613500.0864

ROY F. WESTON INC.

INORGANICS PRECISION REPORT 04/18/91

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

WESTON BATCH #: 9103L044

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-001REP	B00FC5	Specific Conductance	445	447	0.45
		Total Dissolved Solids	309	308	0.32
-004REP	B00F85	Ammonia, as N	0.10u	0.10u	NC
		Sulfate	18.3	16.5	9.9

9613500.0865

ROY F. WESTON INC.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 04/18/91

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	91LC115-LC1	Cyanide, Total LCS	96.8	100	UG/L	96.8
LCS2	91LC115-LC2	Cyanide, Total LCS	97.4	100	UG/L	97.4

9613500.0866

VALIDATION SUMMARY

OSM ORGANIC DATA ASSESSMENT

DATE 7/31/91

SAMPLES/MATRIX B00FC5 ~~B00FC6~~ B00FE1 B00F85 ~~B00F86~~

REVIEWED BY MARK A. BECK m.a.b.

LABORATORY WESTON

CASE # RFW# 9103L944

SDG # —

DATA ASSESSMENT SUMMARY

	VOA	ABN	PEST
1. Holding Times (Form I)	O	O	O
2. Surrogate Recovery (II)	O	X	X
3. Matrix Spike/ MSD (III)	O	O	M
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)	O	X	
8. Instr. Perform. (IX pest)			M
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: VOA and SemiVOA had no major problems Pesticide/PCB's was missing the matrix spike and failed a surrogate test.

NOTES : Samples B00FE1 analyzed for VOA only

Refer to the corresponding attachments for explanation of any problems.

ok to transmit

8/2/91

9613500.0868

ORGANIC QC - Holding Times

Name Mark A. Beckman Date 7/30/91

COMMENTS: VOA - holding times met for all samples. SemiVOA - Holding times met for all samples. Pest/PCB - Holding times met for all ~~sam~~ samples.

ACTION: VOA - no action needed SemiVOA - none needed Pest/PCB - no action

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

ORGANIC QC - Surrogate Recovery

Name Mark A. Beck Date ~~3~~ 7/30/91

COMMENTS: VOA all samples and blanks met surrogate recovery criteria. Semi VOA - 2-Fluorophenol was out of the specified limits for blank SBLKE0368-MB1 BS, 10% vs upper limit of 100%. Pest/PCB - B00FC5 was out of control on the high side.

ACTION: VOA - none needed Semi VOA no qualification needed all surrogate recoveries > 10%. Pest/PCB B00FC5 qualified as estimated (J or UJ).

sample #	constituent	value/qual	sample #	constituent	value/qual
B00FC5	all Pest	J or UJ			

ORGANIC QC - MS/MSD

Name Mark A. Beck Date 7/30/91

COMMENTS: VOA (B00F5D) matrix spike recoveries and % RPD were within QC limits for all compounds. However, recoveries were all on the high side. Semi VOA - all matrix spike (B00F recoveries and % RPD were within control limits. Pest/PCB - errors in spiking led to not reporting spike info

ACTION: Note high bias to matrix spike recoveries. - VOA Semi/Vol - none - none needed. PCB/Pest qualified both (all) samples UJ or J.

sample #	constituent	value/qual	sample #	constituent	value/qual
B00FC5	all	UJ or J			
B00F85	all PCB/Pest	UJ or J			

ORGANIC QC - Blanks

Name Mark A. Beck MCB Date 7/30/91

COMMENTS: VOA a method blank is associated with each sample. Methylene Chloride and Acetone were found as contaminants in both blanks run. Semi VOA - no contaminants found in blanks, but blank spike recoveries were out of control. PCB/Pest. - a blank was run, meeting criteria, no contaminants found

ACTION: VOA - Qualify all methylene chloride and acetone results undetected (U). Semi VOA - no action, no matrix spikes were needed for blanks. PCB/Pest. - no action.

sample #	constituent	value/qual	sample #	constituent	value/qual
all VOA	methylene chloride	U			
	acetone	U			

ORGANIC QC - GC/MS Tune

Name Mark A. Beck Date 7/30/91

COMMENTS: VOA- all ion abundance criteria were met. A tune was performed within 12 hours of each sample analysis. SemiVOA- Tunes performed appropriately, all ion abundance limits met. PCB/Pest. - not relevant.

ACTION: VOA- all criteria met, no action needed. SemiVOA- no action, none needed.

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

ORGANIC QC - Calibrations

Name Mark A. Beckman Date 7/30/91

COMMENTS: VOA initial and continuing calibrations were run at appropriate times. All SPCC and CCC ~~sta~~ criteria were met for all ~~in~~ initial and continuing calibrations. SemiVOA- initial and continuing calibrations were run within 12 hrs of ~~standards~~ standards or samples. All SPCC and CCC criteria met for all initial and continuing calibrations PCB/Pest - ~~the~~ Analytical sequence

ACTION: VOA-none. SemiVOA-none ~~PCB/Pest.~~

PCB/Pest ~~at~~ endrin, methoxychlor qualified UJ for both samples.

% RSD <10 on Form VII

% D <15 ~~except~~ except for methoxychlor ~~endrin~~ endrin

sample #	constituent	value/qual	sample #	constituent	value/qual
B00FC5	endrin methoxychlor	UJ			
B00F85	endrin methoxychlor	UJ			

ORGANIC QC - Internal Standards

Name Mark A. Beck MAB Date 7/30/91

COMMENTS: VOA - all internal standards met area and Retention time criteria. Semi VOA - B50 was high for internal stand IS5 and IS6, B00FC5, B00FC5MS, B00FMSD were out of control for area (low) for IS6 (Perylene-d^{12}), B00FC5, B00FC5MS were too low recoveries for crysene-d^{12}. All other standards and samples fell within control limit, but often were of low recoveries.

ACTION: None - VOA Semi VOA qualified B00FC5, ~~B00FC5MS~~ ~~and B00FC5MSD as~~ estimated (J) JJ 8/2/91 JJ 8/2/91

sample #	constituent	value/qual	sample #	constituent	value/qual
~~500~~ B00FC5	all Semi VOA	UJ	~~comments: PCB/Pest~~		
~~B00FC5MS~~	~~all Semi VOA~~	~~J~~ JJ 8/2/91			
~~B00FC5MSD~~	~~all Semi VOA~~	~~J~~ JJ 8/2/91			

9614500L0875

ORGANIC QC - Instrument Performance (pest)

Name Mark A. Beckman Date 7/31/91

COMMENTS: DDT retention time is >12 min. ~~for~~ Standards are within retention time window listed on ~~for~~ Form IX Endrin and DDT % breakdown limits not exceeded. ~~BOOT 85 MSO 90 D~~ DBC % D not exceeded for Evaluation Standard mix A.

ACTION: none - non needed

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

9613500.0876

ORGANIC QC - Other

Name Mark A. Beckman Date 7/30/91

COMMENTS: none - VOA none + SemiVOA

ACTION: none VOA none Sem. VOA

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

9113500.0877 1A 0000017

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: AK3K18

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ Date Analyzed: 03/20/91

Column: (pack/cap) CAP 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	19	~~B~~ U
67-64-1	Acetone	31	~~B~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

JJ 10/6/91

9113500.0879

0000018

CLIENT SAMPLE NO.

B00FC5

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-001

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

Lab File ID: AK3K18

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

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 13500.0879

0000027

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOOFF1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-003

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

Lab File ID: AK3M04

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____

Date Analyzed: 03/22/91

Column: (pack/cap) CAP

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	9	~~B~~ U
67-64-1	Acetone	10	~~B~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	
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

JJ 10/6/91

9413500.0880 0000025

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOFF1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-003

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

Lab File ID: AK3M04

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____

Date Analyzed: 03/22/91

Column: (pack/cap) CAP

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.				

9213500.0881 0000032

1A

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00F85

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-004

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: AK3K20

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ Date Analyzed: 03/20/91

Column: (pack/cap) CAP 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	19	~~B~~ U
67-64-1	Acetone	28	~~B~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

JJ 10/6/91

CLIENT SAMPLE NO.

B00F85

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-000

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

Lab File ID: AK3K20

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

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.				

9613500.0883

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000023

CLIENT SAMPLE NO.

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: M040714

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/07/91

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 J
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 J

JB 10/6/91

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: M040714

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/07/91

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	UJ
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	UJ

(1) - Cannot be separated from Diphenylamine

10/6/91

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-001

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M040714

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/07/91

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

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.				

9615580.0886

1b

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000032

CLIENT SAMPLE NO.

B00F85

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L944-004

Sample wt/vol: 990 (g/mL) ML

Lab File ID: M041509

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/15/91

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

9113000.0887

1c

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000033

CLIENT SAMPLE NO.

B00F85

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-004

Sample wt/vol: 990 (g/mL) ML Lab File ID: M041509

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/15/91

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	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

9113500.0888

1F

0000034

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00F85

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-004

Sample wt/vol: 990 (g/mL) ML Lab File ID: M041509

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/15/91

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

96 15900.0889 1b 0000011

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00FC5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-001

Sample wt/vol: 980 (g/mL) ML Lab File ID: 04259103.48

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. _____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/26/91

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	0.051	U J
319-85-7	Beta-BHC	0.051	U
319-86-8	Delta-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)	0.051	U
76-44-8	Heptachlor	0.051	U
309-00-2	Aldrin	0.051	U
1024-57-3	Heptachlor epoxide	0.051	U
959-98-8	Endosulfan I	0.051	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	0.51	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.51	U
5103-74-2	gamma-Chlordane	0.51	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.51	U
11104-28-2	Aroclor-1221	0.51	U
11141-16-5	Aroclor-1232	0.51	U
53469-21-9	Aroclor-1242	0.51	U
12672-29-6	Aroclor-1248	0.51	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U J

JEB 6/27/91

10/6/91

9103L944 0890 ID 0000015

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00F85

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L944-004

Sample wt/vol: 900 (g/mL) ML Lab File ID: 04259103.49

Level: (low/med) LOW Date Received: 03/15/91

% Moisture: not dec. ____ dec. Date Extracted: 03/18/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/26/91

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	0.056	U J
319-85-7	Beta-BHC	0.056	U
319-86-8	Delta-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
1024-57-3	Heptachlor epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
60-57-1	Dieldrin	0.11	U
72-55-9	4,4'-DDE	0.11	U
72-20-8	Endrin	0.11	U
33213-65-9	Endosulfan II	0.11	U
72-54-8	4,4'-DDD	0.11	U
1031-07-8	Endosulfan sulfate	0.11	U
50-29-3	4,4'-DDT	0.11	U
72-43-5	Methoxychlor	0.56	U
53494-70-5	Endrin ketone	0.11	U
5103-71-9	alpha-Chlordane	0.56	U
5103-74-2	gamma-Chlordane	0.56	U
8001-35-2	Toxaphene	1.1	U
12674-11-2	Aroclor-1016	0.56	U
11104-28-2	Aroclor-1221	0.56	U
11141-16-5	Aroclor-1232	0.56	U
53469-21-9	Aroclor-1242	0.56	U
12672-29-6	Aroclor-1248	0.56	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U J

JB 6/27/91

JZ 10/6/91

9613500.0891

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 10/16/91

REVIEWED BY JA Lerch

LABORATORY Weston

~~CASE #~~ RFW # 91031944

SDG # N/A

SAMPLES/MATRIX 300FC5

300FB5

both water

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Alkalinity	Anions IC[1]	Hardness
1. Holding time		O	X	O
2. Method Blank		O	O	O
3. Spike Recovery		O	O	O
4. Duplicates		NE	NE	O
5. Other QC see attachment				
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
NE - not evaluated

OVERALL ASSESSSMENT: no major problems - all results acceptable w/attached qualifiers

NOTES: CN results validated w/ CLP inorganics data package

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

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

9615500.0892

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (cont pg 2)

DATE 10/16/91

REVIEWED BY JA Lerch

LABORATORY Weston

~~CASE #~~ RFW # 91031944

SDG # N/A

SAMPLES/MATRIX See cover

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	NO_3/NO_2	Ammonia	TOC
1. Holdingtime		O	O	O
2. Method Blank		O	O	O
3. Spike Recovery		O	O	O
4. Duplicates		O	O	O
5. Other QC See attachment				
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: —

NOTES: —

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

9613500.0893

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (cont pg 3)

DATE 10/16/91

REVIEWED BY JA Lerch

LABORATORY Weston

~~CASE #~~ RFW 91031944

SDG # N/A

SAMPLES/MATRIX see cover

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Sulfate	Conductance	TDS
1. Holding time		O	O	O
2. Method Blank		O	O	O
3. Spike Recovery		O	O	N/A
4. Duplicate		O	O	O
5. Other QC See attachment				
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:

NOTES:

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

54 PRD 046

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: Holding time

COMMENTS: Anions- nitrate, nitrite, phosphate 48 hr Hold time exceeded
Alkalinity- 14 day Holding time met:
Sulfate, TOC, NO_2/NO_3, ammonia, conductance - 28 day HT met for all samples
hardness, TDS - no hold time specified, samples analyzed within 20 day.

ACTION: qualify associated results as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
B00FC5	nitrite	UJ			
	nitrite	J			
	phosphate	UJ			
B00F85	nitrite	UJ			
	nitrate	J			
	phosphate	UJ			

9615500.0895

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: Method Blank

COMMENTS: Alkalinity - all blank results ok (91LAL007-MB1 thru 3AB4)
Anions - method blank 91LIC14-MB1 ok
Hardness - all blanks ok (91LHD006-MB1 + MB2)
NO_2/NO_3 - method blank 91LNO115-MB1 ok

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch Date 7/8/91

QC Check: Method Blank

COMMENTS: Ammonia - all method blanks ok (91LAM029-MB1 thru MB3)
TOC - method blank ok (91LTC058-MB1)
Sulfate - blank results ok (91LS4021-MB1 + MB2)
Conductance - all blanks ok ; TDS - method blank 91LSS025-MB1 ok

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: Spike Recovery

COMMENTS: • Ammonia, Sulfate – MS recoveries within limits (B00F85)

• Alkalinity, Anions, Hardness, NO_2/NO_3, Ammonia, TOC, sulfate, conductance – all blank spike recoveries within limits

• Hardness, NO_2/NO_3, Ammonia, TOC, sulfate – all dup spike %R ok

ACTION: none

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

9614590.0898

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: Duplicates

COMMENTS: Conductance, TDS - replicate % D acceptable (B00FC5)
Ammonia, Sulfate - replicate % D acceptable (B00F85)
Hardness, NO_2/NO_3, Ammonia, TOC, Sulfate - all BS/BSD
% diff within limits

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: Other QC

COMMENTS: Dupicate analysis not evaluated for Anions, Alkalinity – other samples from this projects have not shown problems

ACTION: —

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

9413500.0900

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/18/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	B00FC5	Alkalinity	110	MG/L	2.0
		Chloride by IC	13.8	mg/L	0.50
		Fluoride by IC	1.0 u	mg/L	1.0
		Nitrite by IC	0.50 uJ	mg/L	0.50
		Nitrate by IC	31.7 J	mg/L	5.0
		Cyanide, Total	10.0 u	UG/L	10.0
		Phosphate by IC	0.50 uJ	mg/L	0.50
		Sulfate by IC	76.3	mg/L	5.0
		Hardness	154	MG/L	2.0
		Nitrate Nitrite	9.0	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.84	MG/L	0.50
		pH	6.8	PH UNITS	0.10
		Sulfate	74.2	MG/L	20.0
		Specific Conductance	445	UMHOS/CM	1.0
		Total Dissolved Solids	309	MG/L	5.0
-004	B00F85	Alkalinity	108	MG/L	2.0
		Chloride by IC	4.5	mg/L	0.25
		Fluoride by IC	0.62	mg/L	0.50
		Nitrite by IC	0.25 uJ	mg/L	0.25
		Nitrate by IC	10.2 J	mg/L	2.5
		Cyanide, Total	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	19.6	mg/L	2.5
		Hardness	99.8	MG/L	1.0
		Nitrate Nitrite	2.6	MG/L	0.20
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.63	MG/L	0.50
		pH	7.9	PH UNITS	0.10
		Sulfate	18.3	MG/L	10.0
		Specific Conductance	278	UMHOS/CM	1.0
		Total Dissolved Solids	118	MG/L	5.0

10/16/91

9613500.0901

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 11/10/91

REVIEWED BY JA Lerch

LABORATORY Weston

~~CASE #~~ RFW# 91031L913 (also 91031L944)

SDG # N/A

SAMPLES/MATRIX B00F79 B00FG2 B00FB5
B00F80 B00FF8 B00F86
B00F69 B00FF9 all water
B00F70 B00FC5
B00FG1 B00FC6

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS ICP(Bi,Sr,Sn)		
1. Holding time	O		
2. Blanks	O		
3. Spike Recovery	O		
4. Duplicate	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: all results acceptable

NOTES: See CLP report for TAL results, CASE NARRATIVE, etc.; disregard all other results reported w/this package

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

9613500.0902

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: Holding time

COMMENTS: - 6 mo Holding time met for all samples

ACTION: none

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

9615508.0903

RCRA LEVEL C QC

Name JA Lerch JL Date 11/9/91

QC Check: Blanks

COMMENTS: -all method blanks free of contamination

ACTION: none

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

9613500.0904

RCRA LEVEL C QC

Name JA Lerch JL Date 11/9/91

QC Check: Spike Recovery

COMMENTS: 300FF9 - Bi, Sr, Sn MS %R within control limits.
Bi MSD %R also ok
- all LCS spike + Spike dup %R ok for Sn, Sr

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: Duplicate

COMMENTS: B00FF9 – Bi, Sr, Sn replicate %D within applicable limits; Bi MSD %D ok
– all LCS spike & spike dup %D ok

ACTION: none

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

9613590.0906

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 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	B00F79	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	150	u	UG/L	150
		Calcium, Total	5000	u	UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	10.0	u	UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	100	u	UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	5000	u	UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	5000	u	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	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 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	B00F80	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	5000	u	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	5000	u	UG/L	5000
		Magnesium, Soluble	5000	u	UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	5000	u	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	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

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-003	B00F69	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	150	u	UG/L	150
		Calcium, Total	38200		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	29.3		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	214		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	11900		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	20900		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	186		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 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	B00F70	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	39700		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	5670		UG/L	5000
		Magnesium, Soluble	12300		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	21300		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	192		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

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	B00FG1	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	150	u	UG/L	150
		Calcium, Total	32800		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	36.4		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	322		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	6290		UG/L	5000
		Magnesium, Total	9260		UG/L	5000
		Manganese, Total	26.3		UG/L	15.0
		Sodium, Total	23500		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	165		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 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-006	B00FG2	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	32400		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	6410		UG/L	5000
		Magnesium, Soluble	9140		UG/L	5000
		Manganese, Soluble	21.4		UG/L	15.0
		Sodium, Soluble	23200		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	162		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

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-007	B00FF8	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	150	u	UG/L	150
		Calcium, Total	38800		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	57.9		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	335		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	12000		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	20300		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	187		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 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-008	B00FF9	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.6		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	37300		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	5490		UG/L	5000
		Magnesium, Soluble	11600		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	20200		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	180		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

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	B00FC5	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	150	u	UG/L	150
		Calcium, Total	41500		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	31.5		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	161		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5790		UG/L	5000
		Magnesium, Total	13600		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	26900		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	5.4		UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	205		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 05/28/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	B00FC6	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	37500		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	5000	u	UG/L	5000
		Magnesium, Soluble	11500		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	21500		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.0
		Lead, Soluble	7.8		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	183		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

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	B00F85	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	150	u	UG/L	150
		Calcium, Total	28300		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	51.2		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	255		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	8450		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	13500		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	138		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 05/28/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	B00F86	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	26100		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	5000	u	UG/L	5000
		Magnesium, Soluble	7770		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	12800		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	126		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

9615500.0919

OSM INORGANIC DATA ASSESSMENT

DATE 8/7/91

REVIEWED BY MARK A. BECKMAN

LABORATORY Weston

CASE # RFW# 9103L913, 9103L944

SDG #

SAMPLES/MATRIX B00F79 B00F80 B00F69 B00F70 B00F61 B00F62 B00FF8 B00FF9 B00FC5 B00FC6 B00F85 B00F86 all water

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN
1. Calibrations (Form II)	O	O	O	X
2. Blanks (III)	X	X	O	O
3. ICS (IV)	X			
4. Matrix Spike (V)	X	O	M	O
5. Duplicate Analysis (VI)	O	O	O	O
6. LCS (VII)	O	O		
7. Serial Dilution (IX)	O			
8. GFAA		O		
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: all mercury data unusable, other data qualified as marked on Form I sheets.

NOTES: Sr, Sn, Bi done under a separate RCRA validation procedure.

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

Raw data, original validation with RFW 9103L913

ok to transmit - JJ 10/5/91

INORGANIC QC - Calibrations

Name Mark A. Beckmann. Date 8/6/91

COMMENTS: Appropriate standards were run for AA (all analyses) ICP, ~~and~~ Hg and CN. Hg correlation coefficient met standards. CN correlation coefficient not found. All ICV and CCV met acceptance criteria.

ACTION: Qualify all CN as estimated (J) or undetected estimated (U

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

9613500.0921

INORGANIC QC - Blanks

Name Mark A. Beck (MAB) Date 8/6/91

COMMENTS: All blanks free of contaminants except magnesium (103.3) 5x = 516, sodium (164.5) 5x = 824, vanadium (13.3) 5x = 66.5 and zinc (3.6) 5x = 18 and selenium (1.2) 5x = 6

ACTION: magnesium - none - all above 516 ug/L - reduce dilution. sodium, as per procedure, all other > 184 ppm. Zn - qualified as per procedure, as was Se

sample #	constituent	value/qual
B00F79	Na sodium	U
B00F69 B00F70 B00F61 B00FF8 B00FF9 B00FC5 B00FC6 B00F85 B00F86	V vanadium	U
B00F79 B00F80 B00F69 ~~B00F70~~ MAB B00F61 B00FF8 B00FC5	Zn Zinc	U

sample #	constituent	value/qual
B00F79 B00F80 B00F69 B00F70 B00F61 B00F62 B00FF8 B00FF9 B00FC5 B00FC6	Se selenium	U

9615500.0922

INORGANIC QC - ICS

Name Mark A. Beckman Date 8/6/91

COMMENTS: ICS were run at beginning of and end of ~~sam~~ analysis. Results were observed for elements not ~~so~~ present in standard. Negative results were observed for antimony (Sb), potassium (K), sodium Na. Positive results were observed for manganese (Mn). All other for which contro limits ap within contr lim

ACTION: Sodium-negative, lead < IDL, potassium values < CRDL qualified as J (if > IDL) UJ if < IDL. Manganese results qualified estimated if > IDL and < 800 ug/L

sample #	constituent	value/qual	sample #	constituent	value/qual
all ~~B00F69~~	Sb antimony	~~UJ~~ acceptable 10/5/91	B00F69	Mn	J
			B00F70	Manganese	
			B00F61		
			B00F62		
			B00FF8		
			B00FF9		
			B00F85		
B00F69 B00FF8 B00FC6 B00F85 B00F86	K potassium	~~J~~ ~~UJ~~ acceptable 10/5/91			
B00F79 B00F80	K potassium	UJ			

INORGANIC QC - Matrix Spike

Name Mark A. Beckman. Date 8/6/91

COMMENTS: Mercury and silver were out of control limits. Mercury had very low (0.0%) and silver had low 59% recovery.

ACTION: all mercury results were unusable (R). All silver results qualified as undetected estimated (UJ).

sample #	constituent	value/qual	sample #	constituent	value/qual
all	mercury	R			
all	silver	UJ			

9613500.0924

INORGANIC QC - Duplicate Analysis

Name Mark A. Beck Date 8/6/91

COMMENTS: All duplicate analyses met acceptance criteria.

ACTION: none - none needed

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

INORGANIC QC - LCS

Name Mark A. Beckman Date 8/6/91

COMMENTS: Antimony failed acceptance criteria for % recovery. However no control limits apply for antimony (56). All other elements met acceptance criteria.

ACTION: none - none needed

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

9615500.0926

INORGANIC QC - Serial Dilution

Name Mark A. Beckwith Date 8/6/91

COMMENTS: All % differences fell within limits for those analytes to which control limits apply.

ACTION: none - none needed

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

9615500.0927

INORGANIC QC - Holding Times

Name Mark A. Beckman Date 8/7/91

COMMENTS: Cyanide, metals and Mercury all met holding times.

ACTION: none - none needed

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

9615503.0928

INORGANIC QC - ~~other~~ GFAA

Name JA Lerch Date 10/5/91

COMMENTS: -all replicate injections within RSD limits; some analytical spike recoveries out of limits (see below)
MSA performed on some samples - all coefficients ok

ACTION: qualify associated results per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
B00F79	Tl	UJ			
B00F69	Se				
	Tl				
B00F70	Se				
B00FG1	Se				
B00F62	Se				
B00FF8	Se	J			
B00FF9	Pb	UJ			
	Se				
B00FC6	Pb				
	Se				

9613500.0929

INORGANIC QC - other

Name Mark A. Beckman Date 8/7/91

COMMENTS: none

ACTION: none

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

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F79

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103913001

Level (low/med): LOW Date Received:03/13/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	~~U~~	UJ	P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	92.0	U		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	37.0	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	~~U~~ ~~N~~	R	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	1010	~~U~~	UJ	P
7782-49-2	Selenium	1.50	~~B~~	U	F
7440-22-4	Silver	4.00	~~U~~ ~~N~~	UJ	P
7440-23-5	Sodium	277	~~B~~	U	P
7440-28-0	Thallium	5.00	~~U~~	W UJ	F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	17.5	~~B~~	U	P
	Cyanide	5.00	U		C

JJP 8/5/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

MAB 8/7/91

Comments:

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F80

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103913002

Level (low/med): LOW Date Received:03/13/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	92.0	U		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	37.0	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	1010	~~U~~	UJ	P
7782-49-2	Selenium	1.50	~~B~~	U	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	71.0	U		P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	10.9	~~B~~	U	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mab. 8/7/91

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F69

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103913003

Level (low/med): LOW Date Received:03/13/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	9.70	B		F
7440-39-3	Barium	32.6	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	38200			P
7440-47-3	Chromium	29.3			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	214			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	11900			P
7439-96-5	Manganese	6.00	~~B~~	J	P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	11.9	B		P
7440-09-7	Potassium	4900	~~B~~	~~X~~	P
7782-49-2	Selenium	3.20	~~B~~	~~W~~ UJ	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	20900			P
7440-28-0	Thallium	5.00	~~U~~	W UJ	F
7440-62-2	Vanadium	27.9	~~B~~	U	P
7440-66-6	Zinc	9.90	~~B~~	U	P
	Cyanide	9.41	U		C

JT 10/5/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mab. 8/7/91

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F70

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103913004

Level (low/med): LOW Date Received:03/13/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	9.00	B		F
7440-39-3	Barium	32.2	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	39700			P
7440-47-3	Chromium	6.60	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	51.4	B		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	12300			P
7439-96-5	Manganese	3.80	~~B~~	J	P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5670			P
7782-49-2	Selenium	3.10	~~B~~	~~W~~ UJ	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	21300			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	27.8	~~B~~	U	P
7440-66-6	Zinc	3.00	U		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MAB 8/7/9

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FG1

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103913005

Level (low/med): LOW Date Received:03/13/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	8.20	B		F
7440-39-3	Barium	35.4	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32800			P
7440-47-3	Chromium	36.4			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	322			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	9260			P
7439-96-5	Manganese	26.3		J	P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ P	CV
7440-02-0	Nickel	17.4	B		P
7440-09-7	Potassium	6290			P
7782-49-2	Selenium	2.70	~~B~~	~~W~~ UJ	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	23500			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	26.1	~~B~~	U	P
7440-66-6	Zinc	13.4	~~B~~	U	P
	Cyanide	5.00	U		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.

B00FG2

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103913006

Level (low/med): LOW Date Received:03/13/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	7.10	B		F
7440-39-3	Barium	32.0	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32400			P
7440-47-3	Chromium	3.70	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	9140			P
7439-96-5	Manganese	21.4		J	P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6410			P
7782-49-2	Selenium	2.40	~~B~~	~~W~~ UJ	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	23200			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	25.1	~~B~~	U	P
7440-66-6	Zinc	18.8	~~B~~	U mah	P
	Cyanide				

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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.

B00FF8

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103913007

Level (low/med): LOW Date Received:03/13/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	9.60	B		F
7440-39-3	Barium	31.4	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	38800			P
7440-47-3	Chromium	57.9			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	335			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	12000			P
7439-96-5	Manganese	7.80	~~B~~	J	P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	26.1	B		P
7440-09-7	Potassium	4800	~~B~~	J	P
7782-49-2	Selenium	2.60	~~B~~	~~W~~ J	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	20300			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	28.4	~~B~~	U	P
7440-66-6	Zinc	12.4	~~B~~	U	P
	Cyanide	9.12	U		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.

B00FF9

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103913008

Level (low/med): LOW Date Received:03/13/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	10.6			F
7440-39-3	Barium	29.6	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	37300			P
7440-47-3	Chromium	4.60	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	2.00	~~U~~	~~W~~ UJ	F
7439-95-4	Magnesium	11600			P
7439-96-5	Manganese	3.60	~~B~~	J	P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5490			P
7782-49-2	Selenium	3.00	~~B~~	~~W~~ UJ	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	20200			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	27.5	~~B~~	U	P
7440-66-6	Zinc	3.00	U		P
	Cyanide				

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.

B00FC5

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103944001

Level (low/med): LOW Date Received:03/15/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	7.40	B		F
7440-39-3	Barium	43.6	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	41500			P
7440-47-3	Chromium	31.5			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	161			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	13600			P
7439-96-5	Manganese	4.60	~~B~~	J	P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	22.8	B		P
7440-09-7	Potassium	5790			P
7782-49-2	Selenium	5.40	~~S~~	U	F
7440-22-4	Silver	4.00	~~U~~ ~~N~~	UJ	P
7440-23-5	Sodium	26900			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	29.2	~~B~~	U	P
7440-66-6	Zinc	14.9	~~B~~	U	P
	Cyanide	5.00	U		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.

B00FC6

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103944002

Level (low/med): LOW Date Received:03/15/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	8.90	B		F
7440-39-3	Barium	37.2	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	37500			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	37.0	U		P
7439-92-1	Lead	7.80	~~J~~	~~W~~	F
7439-95-4	Magnesium	11500			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	11.1	B		P
7440-09-7	Potassium	4870	~~B~~	J	P
7782-49-2	Selenium	2.80	~~B~~	~~W~~ UJ	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	21500			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	30.5	~~B~~	U	P
7440-66-6	Zinc	3.00	U		P
	Cyanide				

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.

B00F85

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

Lab Code: WESTON Case No: WEST SAS No.: SDG No.: CLP913

Matrix (soil/water): WATER Lab Sample ID: 9103944004

Level (low/med): LOW Date Received: 03/15/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	9.10	B		F
7440-39-3	Barium	28.6	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	28300			P
7440-47-3	Chromium	51.2			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	255			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	8450			P
7439-96-5	Manganese	6.30	~~B~~	J	P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	32.4	B		P
7440-09-7	Potassium	4950	~~B~~	J	P
7782-49-2	Selenium	1.00	U		F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	13500			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	32.0	~~B~~	U	P
7440-66-6	Zinc	9.20	B		P
	Cyanide	5.00	U		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.

B00F86

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP913

Matrix (soil/water):WATER Lab Sample ID:9103944005

Level (low/med): LOW Date Received:03/15/91

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	9.30	B		F
7440-39-3	Barium	25.4	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	26100			P
7440-47-3	Chromium	6.40	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	7770			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	~~U~~	NJ R	CV
7440-02-0	Nickel	8.30	B		P
7440-09-7	Potassium	4900	~~B~~	J	P
7782-49-2	Selenium	1.20	B		F
7440-22-4	Silver	4.00	~~U~~	NBJ	P
7440-23-5	Sodium	12800			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	30.0	~~B~~	U	P
7440-66-6	Zinc	10.0	B		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

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Comments:

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