198

WESTON Analytics Use Only

91031844

Custody Transfer Record/Lab Work Request

WESTON

Page 1 of 1

Client: Westinghouse Hanford

Est. Final Proj. Sampling Date:

Work Order #: 61168-02-01-0000

Project Contact/Phone #:

AD Project Manager: Jackie King

QC: CLP Del: CLP TAT: 30 day

Date Rec'd: 3/7/91 Date Due: 4/11/91

Account #: WS-HANFORD

Refrigerator #

#/Type Container		VOA	BNA	Pest PCB	Herb	RAD WORK	Tot Uranium	Tritium	TOC	Metal	CN	Anions	Inorg	Inorg
	Liquid	3/G	2/G	→		1/P	1/P	1/G	1/G	1/P	1/P	1/P	1/P	1/P
	Solid													
Volume	Liquid	40ml	950	→		500	500	250	125	500	500	500	500	500
	Solid													
Preservatives		None	None →			HNO3	HCL	None	H2SO4	HNO3	NaOH	None	HNO3	H2SO4
ANALYSES REQUESTED		ORGANIC								INORG				
		UO2444	UO2514	UO2614		ISUC	ISUC	ISUC	IDCT	TOT Bottom See Below	ICNTU	See Below	See Below	See Below

MATRIX TYPES:
Soil, Sediment, Solid, Sludge, Water, Oil, Air, Drum Solids, 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	RAD WORK	Tot Uranium	Tritium	TOC	Metal	CN	Anions	Inorg	Inorg
001	B00F41		W	3/4/91	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
2	B00F42												✓				
3	B00F56				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
4	F57												✓				
5	FC1				✓												
6	FF2				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
7	FF3												✓				

*RAD = Gross Alpha, Beta, Radium, SR90, TC90, CS137, CO60, PU238, PU239/240

** Metals = HSL + BI, SR, SN

Special Instructions:
*** Anions - ICL, ICF1, ICO4, ICPO4, ICNO3, ICNO2
**** Inorg (1) Pb, Fe, Mn, Tds, Cl, SO4
***** Inorg (2) Na(D), Mg(D), K(D), SiO2

DATE/REVISIONS:
1
2
6

BEST AVAILABLE COPY

DEC 1998 RECEIVED

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
[illegible]	[illegible]	3 7 91	11 32	[illegible]	[illegible]	3 7 91	3:36 pm
[illegible]	[illegible]	3-7-91	11:38 am				

Discrepancies Between Samples Labels and COC Record? Y or N

NOTES:

WESTON Analytics Use Only

Samples were:
1) Shipped or Hand Delivered
Airbill # 2426159043 2426159054
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

PH 4 [illegible]

002

91031844-033-024

0046095

STATS

9215512.1501

1A
VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOOF41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-001

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

Lab File ID: W031404

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
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	6	B
67-64-1	Acetone	2	JB
75-15-0	Carbon Disulfide	2	JB
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

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BOOF41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L844-001

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: W031404

Level: (low/med) LOW Date Received: 03/07/91

% Moisture: not dec. _____ Date Analyzed: 03/14/91

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

Number TICs found: 0

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

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

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOOF56

Lab Name: Roy F. Weston, Inc. Work Order: 3168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: W031405

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

9213512.1504

0000027

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOF56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: W031405

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

9213612.1505

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOOFC1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-005

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

Lab File ID: W031406

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	16	B
67-64-1	Acetone	22	B
75-15-0	Carbon Disulfide	2	JB
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	1	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

9213512.1506

CLIENT SAMPLE NO.

BOOFC1

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: 9103L844-005

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

Lab File ID: W031406

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

1A

0000094

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

VBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LVW037-MB1

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

Lab File ID: W031403

Level: (low/med) LOW

Date Received: 03/14/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	
67-64-1	Acetone	19	
75-15-0	Carbon Disulfide	2	J
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

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

VBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LVW037-MB1

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

Lab File ID: W031403

Level: (low/med) LOW

Date Received: 03/14/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

9213512.1509

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000017

CLIENT SAMPLE NO.

B00F41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L844-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: V040421

Level: (low/med) LOW Date Received: 03/07/91

% Moisture: not dec. _____ dec. Date Extracted: 03/11/91

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

9103512.1510

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000018

CLIENT SAMPLE NO.

B00F41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-001

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

Lab File ID: V040421

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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)	1	JB
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	8	JB
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9743512.1511

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000019

CLIENT SAMPLE NO.

B00F41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-001

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

Lab File ID: V040421

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.43	70	JB
2.	TRIETHYLENE GLYCOL	13.63	9	J
3.	UNKNOWN	21.93	20	JB
4.	UNKNOWN	22.80	30	JB
5.	UNKNOWN	22.98	60	JB
6.	UNKNOWN	23.88	10	J
7.	UNKNOWN	23.98	20	JB
8.	UNKNOWN	24.40	7	J
9.	UNKNOWN	25.15	4000	JB
10.	UNKNOWN	25.33	80	JB
11.	UNKNOWN	25.58	100	JB
12.	UNKNOWN	25.77	80	JB
13.	UNKNOWN	26.00	80	JB
14.	UNKNOWN	26.25	20	JB
15.	UNKNOWN	26.72	10	J
16.	UNKNOWN	27.25	70	JB
17.	UNKNOWN	28.07	40	JB
18.	UNKNOWN	30.65	20	JB
19.	UNKNOWN	34.00	20	JB

9213512.1512

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000053

CLIENT SAMPLE NO.

B00F56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: V040422

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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

9103512.1513

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000054

CLIENT SAMPLE NO.

B00F56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: V040422

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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)	1	JB
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	JB
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9713512.1514

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000055

CLIENT SAMPLE NO.

BOOF56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: V040422

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.42	40	JB
2.	UNKNOWN	12.33	5	JB
3.	UNKNOWN	21.95	10	JB
4.	UNKNOWN	22.80	20	JB
5.	UNKNOWN	22.98	40	JB
6.	UNKNOWN	23.90	7	J
7.	UNKNOWN	24.00	10	JB
8.	UNKNOWN	24.42	7	J
9.	UNKNOWN	25.15	3000	JB
10.	UNKNOWN	25.33	80	JB
11.	UNKNOWN	25.60	90	JB
12.	UNKNOWN	25.77	60	JB
13.	UNKNOWN	25.90	20	J
14.	UNKNOWN	26.02	70	JB
15.	UNKNOWN	26.25	10	JB
16.	UNKNOWN	27.25	80	JB
17.	UNKNOWN	28.07	50	JB
18.	UNKNOWN	30.65	20	JB
19.	UNKNOWN	38.63	20	J

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000089

CLIENT SAMPLE NO.

B00FF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-006

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

Lab File ID: V040503

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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

9713512.1516

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000090

CLIENT SAMPLE NO.

B00FF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-006

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

Lab File ID: V040503

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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

(1) - Cannot be separated from Diphenylamine

9713512.1517

0000091

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOFF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-006

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

Lab File ID: V040503

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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: 22

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.68	100	J
2.	UNKNOWN	12.42	5	J
3.	TRIETHYLENE GLYCOL	13.70	10	J
4.	UNKNOWN	21.97	30	JB
5.	UNKNOWN	22.82	50	JB
6.	UNKNOWN	23.00	90	JB
7.	UNKNOWN	23.78	4	J
8.	UNKNOWN	23.90	10	J
9.	UNKNOWN	24.02	20	JB
10.	UNKNOWN	24.42	5	J
11.	UNKNOWN	25.18	3000	JB
12.	UNKNOWN	25.35	60	JB
13.	UNKNOWN	25.62	90	JB
14.	UNKNOWN	25.78	60	JB
15.	UNKNOWN	25.92	10	J
16.	UNKNOWN	26.02	70	JB
17.	UNKNOWN	26.27	10	JB
18.	UNKNOWN	26.73	10	J
19.	UNKNOWN	27.25	60	J
20.	UNKNOWN	28.07	40	JB
21.	UNKNOWN	30.67	20	JB
22.	UNKNOWN	30.95	6	J

9213512.1518

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000197

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0330-MB1

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

Lab File ID: V040507

Level: (low/med) LOW

Date Received: 03/11/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0330-MB1

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

Lab File ID: V040507

Level: (low/med) LOW

Date Received: 03/11/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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)	1	J
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	3	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	6	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

9213512.1520

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000199

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0330-MB1

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

Lab File ID: V040507

Level: (low/med) LOW

Date Received: 03/11/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.38	30	J
2.	UNKNOWN	12.33	5	J
3.	UNKNOWN	21.95	7	J
4.	UNKNOWN	22.82	9	J
5.	UNKNOWN	23.00	20	J
6.	UNKNOWN	24.02	4	J
7.	UNKNOWN	25.13	2000	J
8.	UNKNOWN	25.33	40	J
9.	UNKNOWN	25.60	40	J
10.	UNKNOWN	25.78	30	J
11.	UNKNOWN	26.02	40	J
12.	UNKNOWN	26.27	6	J
13.	UNKNOWN	27.27	50	J
14.	UNKNOWN	28.07	40	J
15.	UNKNOWN	30.67	30	J
16.	UNKNOWN	34.02	20	J

9213512.1521

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000229

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0330-MB1 BS

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

Lab File ID: V040509

Level: (low/med) LOW

Date Received: 03/11/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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		S
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol		S
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene		S
100-51-6	Benzyl alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-Chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine		S
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic acid	50	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene		S
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol		S
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

S: SPIKE COMPOUND

FORM 1 SV-1

12/88 Rev.

9113512.1522

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000230

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0330-MB1 BS

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

Lab File ID: V040509

Level: (low/med) LOW

Date Received: 03/11/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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		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)	1	JB
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		S
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	3	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene		S
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	5	JB
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

S: SPIKE COMPOUND

FORM 1 SV-2

12/88 Rev.

9713512.1523

1D
PESTICIDE ORGANICS ANALYSIS SHEET 0000012

CLIENT SAMPLE NO.

BOOF41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-001

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

Lab File ID: 04149103.27

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/08/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/16/91

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

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6/6/91

9213512.1524

PESTICIDE ORGANICS ANALYSIS SHEET

0000017

CLIENT SAMPLE NO.

BOOF56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L844-003

Sample wt/vol: 990 (g/mL) ML Lab File ID: 04149103.28

Level: (low/med) LOW Date Received: 03/07/91

% Moisture: not dec. _____ dec. Date Extracted: 03/08/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/16/91

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

6/6/91

9713512.1525

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PESTICIDE ORGANICS ANALYSIS SHEET 0000022

CLIENT SAMPLE NO.

BOOFF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-006

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

Lab File ID: 04149103.29

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/08/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/16/91

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

6/6/91

FORM 1 PEST 12/88 Rev.

9213512.1526

1D

PESTICIDE ORGANICS ANALYSIS SHEET 0000131

CLIENT SAMPLE NO.

PBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0322-MB1

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

Lab File ID: 04149103.41

Level: (low/med) LOW

Date Received: 03/08/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/08/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/16/91

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

4/16/91

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PESTICIDE ORGANICS ANALYSIS SHEET

0000136

CLIENT SAMPLE NO.

PBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0322-MB1 BS

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

Lab File ID: 04149103.42

Level: (low/med) LOW

Date Received: 03/08/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/08/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/16/91

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

Dilution Factor: 2.00

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

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

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S: SPIKE COMPOUND

FORM 1 PEST

12/88 Rev.

9713512.1528

1D

PESTICIDE ORGANICS ANALYSIS SHEET 0000141

CLIENT SAMPLE NO.

PBLKMSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 91LE0322-MB1 BSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 04149103.43

Level: (low/med) LOW Date Received: 03/08/91

% Moisture: not dec. _____ dec. Date Extracted: 03/08/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/16/91

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 2.00

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

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

6/6/91

S: SPIKE COMPOUND FORM 1 PEST 12/88 Rev.

9713512.1529

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOOF41	Alkalinity	90.0	MG/L	2.0
		Chloride by IC	11.3	mg/L	2.5
		Fluoride by IC	1.1	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	30.8	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	42.9	mg/L	2.5
		Hardness	104	MG/L	2.0
		Nitrate Nitrite	6.8	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.8	PH UNITS	0.10
		Sulfate	40.1	MG/L	10.0
		Specific Conductance	345	UMHOS/CM	1.0
		Total Dissolved Solids	239	MG/L	5.0
-003	BOOF56	Alkalinity	98.0	MG/L	2.0
		Chloride by IC	7.2	mg/L	0.25
		Fluoride by IC	0.77	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	51.8	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	39.5	mg/L	2.5
		Hardness	138	MG/L	2.0
		Nitrate Nitrite	12.0	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	1.3	MG/L	0.50
		pH	7.7	PH UNITS	0.10
		Sulfate	37.2	MG/L	10.0
		Specific Conductance	396	UMHOS/CM	1.0
		Total Dissolved Solids	261	MG/L	5.0
-006	BOOFF2	Alkalinity	104	MG/L	2.0
		Chloride by IC	4.7	mg/L	0.25
		Fluoride by IC	0.89	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	14.4	mg/L	2.5
		Cyanide, Total	10.0 u	UG/L	10.0

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-006	BOOFF2	Phosphate by IC	0.25 u	mg/L	0.25
		Sulfate by IC	22.3	mg/L	2.5
		Hardness	102	MG/L	2.0
		Nitrate Nitrite	3.4	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.8	PH UNITS	0.10
		Sulfate	20.3	MG/L	5.0
		Specific Conductance	392	UMHOS/CM	1.0
		Total Dissolved Solids	194	MG/L	5.0

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
BLANK10	91LAL004-MB1	Alkalinity	0.50 u	MG/L	0.50
BLANK20	91LAL004-MB2	Alkalinity	0.50 u	MG/L	0.50
BLANK30	91LAL004-MB3	Alkalinity	0.50	MG/L	0.50
BLANK40	91LAL004-MB4	Alkalinity	0.50	MG/L	0.50
BLANK50	91LAL004-MB5	Alkalinity	2.0 u	MG/L	2.0
BLANK60	91LAL004-MB6	Alkalinity	2.0 u	MG/L	2.0
BLANK1	91LIC12-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	91LC102-MB1	Cyanide, Total	10.0 u	UG/L	10.0
BLANK10	91LHD004-MB1	Hardness	1.0 u	MG/L	1.0
BLANK20	91LHD004-MB2	Hardness	1.0 u	MG/L	1.0

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK30	91LHD004-MB3	Hardness	1.0	u	MG/L	1.0
BLANK10	91LNO110-MB1	Nitrate Nitrite	0.10	u	MG/L	0.10
BLANK10	91LAM035-MB1	Ammonia, as N	0.10	u	MG/L	0.10
BLANK20	91LAM035-MB2	Ammonia, as N	0.10	u	MG/L	0.10
BLANK30	91LAM035-MB3	Ammonia, as N	0.10	u	MG/L	0.10
BLANK10	91LTC053-MB1	Total Organic Carbon	0.50	u	MG/L	0.50
BLANK10	91LS4018-MB1	Sulfate	5.0	u	MG/L	5.0
BLANK20	91LS4018-MB2	Sulfate	5.0	u	MG/L	5.0
BLANK30	91LS4018-MB3	Sulfate	5.0	u	MG/L	5.0
BLANK10	91LSP024-MB1	Specific Conductance	1.0	u	UMHOS/CM	1.0

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK20	91LSP024-MB2	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK30	91LSP024-MB3	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK40	91LSP024-MB4	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK10	91LSS020-MB1	Total Dissolved Solids	5.0	u	MG/L	5.0

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ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/03/91

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

WESTON BATCH #: 3103L844

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
-001	BOOF41	Total Organic Carbon	5.9	0.50u	5.0	118
		Total Organic Carbon	6.0	0.50u	5.0	120
-003	BOOF56	Sulfate	58.0	37.2	20.0	104
-006	BOOFF2	Ammonia, as N	0.94	0.10u	1.0	93.7
BLANK10	91LAL004-MB1	Alkalinity	104	0.50u	100	104
BLANK20	91LAL004-MB2	Alkalinity	100	0.50u	100	100
BLANK30	91LAL004-MB3	Alkalinity	104	0.50	100	104
BLANK40	91LAL004-MB4	Alkalinity	104	0.50	100	104
BLANK50	91LAL004-MB5	Alkalinity	100	2.0 u	100	100
BLANK60	91LAL004-MB6	Alkalinity	102	2.0 u	100	102
BLANK1	91LIC12-MB1	Chloride by IC	5.5	0.25u	5.0	111
		Chloride by IC MSD	5.5	0.25u	5.0	110
		Fluoride by IC	10.8	0.50u	10.0	108
		Fluoride by IC MSD	10.8	0.50u	10.0	108
		Nitrite by IC	5.3	0.25u	5.0	107
		Nitrite by IC MSD	5.3	0.25u	5.0	107
		Nitrate by IC	5.7	0.25u	5.0	113
		Nitrate by IC MSD	5.6	0.25u	5.0	112
		Phosphate by IC	5.6	0.25u	5.0	113
		Phosphate by IC MSD	5.7	0.25u	5.0	114
		Sulfate by IC	5.6	0.25u	5.0	111
		Sulfate by IC MSD	5.6	0.25u	5.0	111

9713512.1535

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK10	91LHD004-MB1	Hardness	100	1.0 u	100	100
BLANK20	91LHD004-MB2	Hardness	100	1.0 u	100	100
		Hardness MSD	70.5	1.0 u	70.5	100
BLANK30	91LHD004-MB3	Hardness	102	1.0 u	100	102
BLANK10	91LNO110-MB1	Nitrate Nitrite	0.42	0.10u	0.40	105
		Nitrate Nitrite MSD	0.41	0.10u	0.40	102
BLANK10	91LAM035-MB1	Ammonia, as N	0.20	0.10u	0.20	100
BLANK20	91LAM035-MB2	Ammonia, as N	1.0	0.10u	1.0	102
BLANK30	91LAM035-MB3	Ammonia, as N	9.6	0.10u	10.0	96.5
BLANK10	91LTC053-MB1	Total Organic Carbon	4.7	0.50u	5.0	94.2
		Total Organic Carbon	4.8	0.50u	5.0	96.1
BLANK10	91LS4018-MB1	Sulfate	20.8	5.0 u	20.0	104
		Sulfate	20.9	5.0 u	20.0	105
BLANK20	91LS4018-MB2	Sulfate	20.5	5.0 u	20.0	103

9713512.1536

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK30	91LS4018-MB3	Sulfate	20.3	5.0 u	20.0	102
BLANK10	91LSP024-MB1	Specific Conductance	143	1.0 u	147	97.3
BLANK20	91LSP024-MB2	Specific Conductance	686	1.0 u	718	95.6
BLANK30	91LSP024-MB3	Specific Conductance	1410	1.0 u	1410	99.9
BLANK40	91LSP024-MB4	Specific Conductance	685	1.0 u	718	95.4

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9713512.1537

ROY F. WESTON INC.

INORGANICS DUPLICATE SPIKE REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
-001	BOOF41	Total Organic Carbon	118	120	1.8
BLANK1	91LIC12-MB1	Chloride by IC	111	110	0.40
		Fluoride by IC	108	108	0.10
		Nitrite by IC	107	107	0.30
		Nitrate by IC	113	112	1.3
		Phosphate by IC	113	114	1.2
		Sulfate by IC	111	111	0.10
LCS2	91LC102-LC2	Cyanide, Total LCS	97.5	99.3	1.8
BLANK20	91LHD004-MB2	Hardness	100	100	0.30
BLANK10	91LNO110-MB1	Nitrate Nitrite	105	102	2.3
BLANK10	91LTC053-MB1	Total Organic Carbon	94.2	96.1	2.1
BLANK10	91LS4018-MB1	Sulfate	104	105	0.30

9713512.1538

ROY F. WESTON INC.

INORGANICS PRECISION REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-001REP	BOOF41	Total Organic Carbon	0.50u	0.50u	NC
		pH	7.8	7.8	0.51
-003REP	BOOF56	Sulfate	37.2	37.2	0.00
-006REP	BOOFF2	Ammonia, as N	0.10u	0.10u	NC

9713512.1539

ROY F. WESTON INC.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 04/03/91

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	91LC102-LC1	Cyanide, Total LCS	97.5	100	UG/L	97.5
LCS2	91LC102-LC2	Cyanide, Total LCS	99.3	100	UG/L	99.3

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF41

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844001

Level (low/med): LOW Date Received:03/07/91

% 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	3.50	B		F
7440-39-3	Barium	37.8	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30900			P
7440-47-3	Chromium	70.4			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	308			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9840			P
7439-96-5	Manganese	7.00	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	46.4			P
7440-09-7	Potassium	5740			P
7782-49-2	Selenium	2.20	B	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	24900			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	38.0	B		P
7440-66-6	Zinc	26.4			P
	Cyanide	5.00	U		C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1541

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF42

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844002

Level (low/med): LOW Date Received:03/07/91

% 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	4.00	B		F
7440-39-3	Barium	36.9	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	31300			P
7440-47-3	Chromium	5.20	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	51.3	B		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9990			P
7439-96-5	Manganese	2.10	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6270			P
7782-49-2	Selenium	1.70	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	25300			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	37.0	B		P
7440-66-6	Zinc	7.20	B		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF56

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844003

Level (low/med): LOW Date Received:03/07/91

% 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	5.90	B		F
7440-39-3	Barium	34.8	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	40900			P
7440-47-3	Chromium	22.5			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	82.5	B		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	12200			P
7439-96-5	Manganese	2.10	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	9.50	B		P
7440-09-7	Potassium	5310			P
7782-49-2	Selenium	2.50	B	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	25100			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	36.6	B		P
7440-66-6	Zinc	14.2	B		P
	Cyanide	8.72	U		C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF57

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844004

Level (low/med): LOW Date Received:03/07/91

% 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	5.40	B		F
7440-39-3	Barium	35.5	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	40900			P
7440-47-3	Chromium	12.0			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.3	B		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	12300			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5800			P
7782-49-2	Selenium	3.00	B	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	26500			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	37.8	B		P
7440-66-6	Zinc	16.4	B		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1544

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF2

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844006

Level (low/med): LOW Date Received:03/07/91

% 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	4.80	B	N	F
7440-39-3	Barium	30.2	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	25000		*	P
7440-47-3	Chromium	29.0		*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	8.80	B		P
7439-89-6	Iron	185			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	7680			P
7439-96-5	Manganese	6.20	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	48.7			P
7440-09-7	Potassium	3920	B		P
7782-49-2	Selenium	1.30	B	WN	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	12400			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	29.2	B		P
7440-66-6	Zinc	36.2		*	P
	Cyanide	5.00	U		C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF3

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844007

Level (low/med): LOW Date Received:03/07/91

% 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	3.90	B	N	F
7440-39-3	Barium	36.3	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30500		*	P
7440-47-3	Chromium	3.20	B	*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	8.10	B		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9390			P
7439-96-5	Manganese	4.10	B		P
7439-97-6	Mercury	0.278			CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5550			P
7782-49-2	Selenium	1.00	U	NW	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	15300			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	34.2	B		P
7440-66-6	Zinc	19.0	B	*	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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0000044

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF50

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869001

Level (low/med): LOW Date Received:03/08/91

% 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	4.60	B		F
7440-39-3	Barium	37.6	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	29300			P
7440-47-3	Chromium	64.0			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	299			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9580			P
7439-96-5	Manganese	6.90	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	34.1	B		P
7440-09-7	Potassium	6180			P
7782-49-2	Selenium	1.00			F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	21900			P
7440-28-0	Thallium	5.00	U	W	F
7440-62-2	Vanadium	41.3	B		P
7440-66-6	Zinc	20.1			P
	Cyanide	5.00	U		C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1547

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF51

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869002

Level (low/med): LOW Date Received:03/08/91

% 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	5.60	B		F
7440-39-3	Barium	39.1	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30400			P
7440-47-3	Chromium	5.20	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	F
7439-95-4	Magnesium	9930			P
7439-96-5	Manganese	2.30	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5550			P
7782-49-2	Selenium	1.20	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	22500			P
7440-28-0	Thallium	5.00	U	W	F
7440-62-2	Vanadium	41.6	B		P
7440-66-6	Zinc	15.0	B		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1548

0000046

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF60

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869003

Level (low/med): LOW Date Received:03/08/91

% 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	6.30	B		F
7440-39-3	Barium	39.1	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	33700			P
7440-47-3	Chromium	73.5			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	12.5	B		P
7439-89-6	Iron	349			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	10000			P
7439-96-5	Manganese	9.70	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	42.7			P
7440-09-7	Potassium	5800			P
7782-49-2	Selenium	1.10	B		F
7440-22-4	Silver	4.20	B		P
7440-23-5	Sodium	16600			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	45.1	B		P
7440-66-6	Zinc	23.4			P
	Cyanide	5.00	U		C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1549

0000047

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF61

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869004

Level (low/med): LOW Date Received:03/08/91

% 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	5.90	B		F
7440-39-3	Barium	36.5	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32000			P
7440-47-3	Chromium	5.40	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	43.9	B		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9530			P
7439-96-5	Manganese	2.10	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5230			P
7782-49-2	Selenium	1.20	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	15900			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	43.0	B		P
7440-66-6	Zinc	36.0			P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1550

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF5

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869005

Level (low/med): LOW Date Received:03/08/91

% 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	6.00	B		F
7440-39-3	Barium	34.4	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	38300			P
7440-47-3	Chromium	167			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	14.8	B		P
7439-89-6	Iron	1210			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	11900			P
7439-96-5	Manganese	23.3			P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	81.9			P
7440-09-7	Potassium	5250			P
7782-49-2	Selenium	1.30	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	22400			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	42.3	B		P
7440-66-6	Zinc	6.40	B		P
	Cyanide	7.95	U		C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF6

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869006

Level (low/med): LOW Date Received:03/08/91

% 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	6.50	B		F
7440-39-3	Barium	33.4	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	7.90	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	53.6	B		P
7439-92-1	Lead	5.20		W	F
7439-95-4	Magnesium	11700			P
7439-96-5	Manganese	5.90	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	8.40	B		P
7440-09-7	Potassium	5330			P
7782-49-2	Selenium	2.00	B	W	F
7440-22-4	Silver	4.50	B		P
7440-23-5	Sodium	22000			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	41.9	B		P
7440-66-6	Zinc	37.5			P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1552

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF63

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869008

Level (low/med): LOW Date Received:03/08/91

% 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	6.80	B	W	F
7440-39-3	Barium	31.2	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	29200			P
7440-47-3	Chromium	48.4			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	9.40	B		P
7439-89-6	Iron	1910			P
7439-92-1	Lead	2.60	B	W	F
7439-95-4	Magnesium	8580			P
7439-96-5	Manganese	24.9			P
7439-97-6	Mercury	0.278			CV
7440-02-0	Nickel	24.6	B		P
7440-09-7	Potassium	6120			P
7782-49-2	Selenium	1.00	U	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	23500			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	44.0	B		P
7440-66-6	Zinc	37.9			P
	Cyanide	5.00	U		C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF64

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869009

Level (low/med): LOW Date Received:03/08/91

% 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	5.80	B		F
7440-39-3	Barium	30.8	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30500			P
7440-47-3	Chromium	7.50	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	55.1	B		P
7439-92-1	Lead	2.90	B	W	F
7439-95-4	Magnesium	8930			P
7439-96-5	Manganese	6.30	B		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.80	B		P
7440-09-7	Potassium	6500			P
7782-49-2	Selenium	1.00	U	W	F
7440-22-4	Silver	4.10	B		P
7440-23-5	Sodium	24400			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	42.7	B		P
7440-66-6	Zinc	12.7	B		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF41

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910384401

Level (low/med): LOW Date Received: 3/07/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	3.50	B		F
7440-39-3	Barium	37.80	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30900.00		*	P
7440-47-3	Chromium	70.40		*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	308.00			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9840.00			P
7439-96-5	Manganese	7.00	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	46.40			P
7440-09-7	Potassium	5740.00			P
7782-49-2	Selenium	2.20	B	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	24900.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	38.00	B		P
7440-66-6	Zinc	26.40		*	P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF42

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910384402

Level (low/med): LOW Date Received: 3/07/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	4.00	B		F
7440-39-3	Barium	36.90	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	31300.00		*	P
7440-47-3	Chromium	5.20	B	*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	51.30	B		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9990.00			P
7439-96-5	Manganese	2.10	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6270.00			P
7782-49-2	Selenium	1.70	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	25300.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	37.00	B		P
7440-66-6	Zinc	7.20	B	*	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF56

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910384403

Level (low/med): LOW Date Received: 3/07/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	5.90	B		F
7440-39-3	Barium	34.80	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	40900.00		*	P
7440-47-3	Chromium	22.50		*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	82.50	B		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	12200.00			P
7439-96-5	Manganese	2.10	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	9.50	B		P
7440-09-7	Potassium	5310.00			P
7782-49-2	Selenium	2.50	B	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	25100.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	36.60	B		P
7440-66-6	Zinc	14.20	B	*	P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF57

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910384404

Level (low/med): LOW Date Received: 3/07/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	5.40	B		F
7440-39-3	Barium	35.50	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	40900.00		*	P
7440-47-3	Chromium	12.00		*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.30	B		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	12300.00			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5800.00			P
7782-49-2	Selenium	3.00	B	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	26500.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	37.80	B		P
7440-66-6	Zinc	16.40	B	*	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF2

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910384406

Level (low/med): LOW Date Received: 3/07/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	4.80	B		F
7440-39-3	Barium	30.20	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	25000.00		*	P
7440-47-3	Chromium	29.00		*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	8.80	B		P
7439-89-6	Iron	185.00			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	7680.00			P
7439-96-5	Manganese	6.20	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	48.70			P
7440-09-7	Potassium	3920.00	B		P
7782-49-2	Selenium	1.30	B	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	12400.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	29.20	B		P
7440-66-6	Zinc	36.20		*	P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF3

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910384407

Level (low/med): LOW Date Received: 3/07/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	3.90	B		F
7440-39-3	Barium	36.30	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30500.00		*	P
7440-47-3	Chromium	3.20	B	*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	8.10	B		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9390.00			P
7439-96-5	Manganese	4.10	B		P
7439-97-6	Mercury	.28			CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5550.00			P
7782-49-2	Selenium	1.00	U	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	15300.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	34.20	B		P
7440-66-6	Zinc	19.00	B	*	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF50

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910386901

Level (low/med): LOW Date Received: 3/08/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	4.60	B		F
7440-39-3	Barium	37.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	29300.00		*	P
7440-47-3	Chromium	64.00		*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	299.00			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9580.00			P
7439-96-5	Manganese	6.90	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	34.10	B		P
7440-09-7	Potassium	6180.00			P
7782-49-2	Selenium	1.00			F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	21900.00			P
7440-28-0	Thallium	5.00	U	W	F
7440-62-2	Vanadium	41.30	B		P
7440-66-6	Zinc	20.10		*	P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF51

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910386902

Level (low/med): LOW Date Received: 3/08/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	5.60	B		F
7440-39-3	Barium	39.10	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30400.00		*	P
7440-47-3	Chromium	5.20	B	*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9930.00			P
7439-96-5	Manganese	2.30	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5550.00			P
7782-49-2	Selenium	1.20	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	22500.00			P
7440-28-0	Thallium	5.00	U	W	F
7440-62-2	Vanadium	41.60	B		P
7440-66-6	Zinc	15.00	B	*	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF60

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910386903

Level (low/med): LOW Date Received: 3/08/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	6.30	B		F
7440-39-3	Barium	39.10	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	33700.00		*	P
7440-47-3	Chromium	73.50		*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	12.50	B		P
7439-89-6	Iron	349.00			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	10000.00			P
7439-96-5	Manganese	9.70	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	42.70			P
7440-09-7	Potassium	5800.00			P
7782-49-2	Selenium	1.10	B		F
7440-22-4	Silver	4.20	B		P
7440-23-5	Sodium	16600.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	45.10	B		P
7440-66-6	Zinc	23.40		*	P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF61

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910386904

Level (low/med): LOW Date Received: 3/08/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	5.90	B		F
7440-39-3	Barium	36.50	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32000.00		*	P
7440-47-3	Chromium	5.40	B	*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	43.90	B		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	9530.00			P
7439-96-5	Manganese	2.10	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5230.00			P
7782-49-2	Selenium	1.20	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	15900.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	43.00	B		P
7440-66-6	Zinc	36.00		*	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF5

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910386905

Level (low/med): LOW Date Received: 3/08/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	6.00	B		F
7440-39-3	Barium	34.40	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	38300.00		*	P
7440-47-3	Chromium	167.00		*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	14.80	B		P
7439-89-6	Iron	1210.00			P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	11900.00			P
7439-96-5	Manganese	23.30			P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	81.90			P
7440-09-7	Potassium	5250.00			P
7782-49-2	Selenium	1.30	B		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	22400.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	42.30	B		P
7440-66-6	Zinc	6.40	B	*	P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF6

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910386906

Level (low/med): LOW Date Received: 3/08/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	6.50	B		F
7440-39-3	Barium	33.40	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	37500.00		*	P
7440-47-3	Chromium	7.90	B	*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	53.60	B		P
7439-92-1	Lead	5.20		W	F
7439-95-4	Magnesium	11700.00			P
7439-96-5	Manganese	5.90	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	8.40	B		P
7440-09-7	Potassium	5330.00			P
7782-49-2	Selenium	2.00	B	W	F
7440-22-4	Silver	4.50	B		P
7440-23-5	Sodium	22000.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	41.90	B		P
7440-66-6	Zinc	37.50		*	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

BOOF63

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910386908

Level (low/med): LOW Date Received: 3/08/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	6.80	B	W	F
7440-39-3	Barium	31.20	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	29200.00		*	P
7440-47-3	Chromium	48.40		*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	9.40	B		P
7439-89-6	Iron	1910.00			P
7439-92-1	Lead	2.60	B	W	F
7439-95-4	Magnesium	8580.00			P
7439-96-5	Manganese	24.90			P
7439-97-6	Mercury	.28			CV
7440-02-0	Nickel	24.60	B		P
7440-09-7	Potassium	6120.00			P
7782-49-2	Selenium	1.00	U	W	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	23500.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	44.00	B		P
7440-66-6	Zinc	37.90		*	P
	Cyanide	10.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF64

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP844

Matrix (soil/water): WATER Lab Sample ID: 910386909

Level (low/med): LOW Date Received: 3/08/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	5.80	B		F
7440-39-3	Barium	30.80	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30500.00		*	P
7440-47-3	Chromium	7.50	B	*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	55.10	B		P
7439-92-1	Lead	2.90	B	W	F
7439-95-4	Magnesium	8930.00			P
7439-96-5	Manganese	6.30	B		P
7439-97-6	Mercury	.20	U		CV
7440-02-0	Nickel	7.80	B		P
7440-09-7	Potassium	6500.00			P
7782-49-2	Selenium	1.00	U	W	F
7440-22-4	Silver	4.10	B		P
7440-23-5	Sodium	24400.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	42.70	B		P
7440-66-6	Zinc	12.70	B	*	P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9213512.1568

9207439

SAIC

Science Applications International Corporation
An Employee-Owned Company

1146-PKB.92
October 13, 1992

Mr. Mark A. Buckmaster
Westinghouse Hanford Company
P.O. Box 1970, MSIN H4-55
Richland, WA 99352

Subject: Deliverable for 200-BP-1 Data Validation, Task Order S-92-19 Rev. D, WHC Contract No. MLW-SVV-073750

Dear Mr. Buckmaster:

Enclosed is the subject deliverable required by the referenced SAIC Task Order and WHC contract. Included in this deliverable, please find a copy of the Data Validation Summary Report for Data Packages 9110L176, 9110L175, and 9103L844. This deliverable was prepared by Golder Associates with support from Kenneth R. Ridgway of SAIC under the direction of Kent M. Angelos.

Should you have any questions, please do not hesitate to contact the following: Mr. Kent Angelos of Golder Associates at (206) 883-0777, Michael Hoxie or myself at (509) 943-3133.

Sincerely yours,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

P. K. Brockman
Program Manager

RECEIVED
OCT 26 1992
CORRESPONDENCE CONTROL

PKB/mkc

Enclosures

cc w/encl:
B. Bechtold, WHC
LB/Task S-92-19 Deliv File

cc w/o encl:
R. Henckel, WHC
D. Martin, Albq
D. Wilson, WHC

cc: w/encl (including original data package):
D. Leech, WHC

1845 Terminal Drive, Suite 202, Richland, Washington 99352 (509) 943-3133
Other SAIC Offices: Albuquerque, Boston, Colorado Springs, Dayton, Huntsville, Las Vegas, Los Angeles, McLean, Oak Ridge, Orlando, Palo Alto, San Diego, Seattle, and Tucson

9213512.1569

SAIC

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SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

P. K. Brockman
Program Manager

PKB/mkc

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LB/Task S-92-19 Deliv File

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D. Wilson, WHC

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22

9715512.1570

APPENDIX B

DATA REVIEW SUPPORTING DOCUMENTATION

SDG: 9103L844-WES-024

SAMPLES: B00F41, B00F56, B00FF2

CONTAINS:

ATTACHMENT 1 - GLOSSARY OF DATA REPORTING QUALIFIERS
ATTACHMENT 2 - SUMMARY OF DATA QUALIFICATIONS
ATTACHMENT 3 - AS QUALIFIED LABORATORY DATA
ATTACHMENT 4 - DATA VALIDATION SUPPORTING DOCUMENTATION

ATTACHMENT 1

GLOSSARY OF DATA REPORTING QUALIFIERS

B - Indicates the compound or analyte was analyzed for and detected. The value reported is less than the contract required quantitation limit (CRQL) but greater than the instrument detection limit (IDL).

U - Indicates the compound or analyte was analyzed for and not detected. The value reported is the sample quantitation limit corrected for sample dilution and moisture content by the laboratory. The data are usable for decision making purposes.

UJ - Indicates the compound or analyte was analyzed for and not detected. Due to identified quality control deficiency identified during data validation the value reported may not accurately reflect the sample quantitation limit. The data are usable for decision making purposes.

J - Indicates the compound or analyte was analyzed for and detected. The associated value is estimated but the data are usable for decision making processes.

R - Indicates the compound or analyte was analyzed for and due to an identified quality control deficiency the data are unusable.

NJ - Indicates presumptive evidence of a compound at an estimated value.

N - Indicates presumptive evidence of a compound.

9713512.1572

ATTACHMENT 2

SUMMARY OF DATA QUALIFICATIONS

DATA QUALIFICATION SUMMARY - FORM B-7

SDG: 9103L844	REVIEWER: S. Schlobl	DATE: 10-6-92	PAGE 1 OF 1
COMMENTS: Wet chemistry			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
NO_3	J	B00F41, 56, F2	Holding time
NO_2, PO_4	UJ	&	exceeded

004

9713512.1574

ATTACHMENT 3

AS QUALIFIED DATA SUMMARY

9715512.1575

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOOF41	Alkalinity	90.0	MG/L	2.0
		Chloride by IC	11.3	mg/L	2.5
		Fluoride by IC	1.1	mg/L	0.50
		Nitrite by IC	0.25 u J	mg/L	0.25
		Nitrate by IC	30.8 J	mg/L	2.5
		Cyanide, Total	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 u J	mg/L	0.25
		Sulfate by IC	42.9	mg/L	2.5
		Hardness	104	MG/L	2.0
		Nitrate Nitrite	6.8	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.8	PH UNITS	0.10
		Sulfate	40.1	MG/L	10.0
		Specific Conductance	345	UMHOS/CM	1.0
		Total Dissolved Solids	239	MG/L	5.0
-003	BOOF56	Alkalinity	98.0	MG/L	2.0
		Chloride by IC	7.2	mg/L	0.25
		Fluoride by IC	0.77	mg/L	0.50
		Nitrite by IC	0.25 u J	mg/L	0.25
		Nitrate by IC	51.8 J	mg/L	2.5
		Cyanide, Total	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 u J	mg/L	0.25
		Sulfate by IC	39.5	mg/L	2.5
		Hardness	138	MG/L	2.0
		Nitrate Nitrite	12.0	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	1.3	MG/L	0.50
		pH	7.7	PH UNITS	0.10
		Sulfate	37.2	MG/L	10.0
		Specific Conductance	396	UMHOS/CM	1.0
		Total Dissolved Solids	261	MG/L	5.0
-006	BOOFF2	Alkalinity	104	MG/L	2.0
		Chloride by IC	4.7	mg/L	0.25
		Fluoride by IC	0.89	mg/L	0.50
		Nitrite by IC	0.25 u J	mg/L	0.25
		Nitrate by IC	14.4 J	mg/L	2.5
		Cyanide, Total	10.0 u	UG/L	10.0

006

SH 10-7-92

9713512.1576

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-006	BOOFF2	Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	22.3	mg/L	2.5
		Hardness	102	MG/L	2.0
		Nitrate Nitrite	3.4	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.8	PH UNITS	0.10
		Sulfate	20.3	MG/L	5.0
		Specific Conductance	392	UMHOS/CM	1.0
		Total Dissolved Solids	194	MG/L	5.0

007

AJJ 10-7-92

9715512.1577

ATTACHMENT 4

DATA VALIDATION SUPPORTING DOCUMENTATION

WET CHEMISTRY DATA VALIDATION CHECKLIST - FORM A-7

PROJECT: 200-BP-1	REVIEWER: SSchilds	DATE: 10-6-92
LABORATORY: Weston	CASE:	SDG: 91032844 ~~91101175~~ SSS 10-6-92
SAMPLES/MATRIX: B00F41, B00F56, B00FF2 / water		

1. DATA PACKAGE COMPLETENESS

Review the data package for completeness and check off the items below. If any data review elements are missing contact the laboratory for submittal of the omitted data.

Data Package Item	Present?: Yes	No	N/A
Case Narrative	✓		
Cover Page	✓		
Traffic Reports/Chain-of-Custody	✓		
Sample Analysis Data Report Forms	✓		
Standards Data	✓		
QC Summary			
Blanks Summary Report Forms	✓		
Spike Sample Recovery Report Forms	✓		
Duplicate Sample Analysis Report Forms	✓		
Laboratory Control Sample Report Forms	✓		
Raw Data			
Ion Chromatograph Chromatograms	✓		
TOC and TOX Instrument Printouts		✓	
Laboratory Bench Sheets	✓		
Additional Data			
Laboratory Sample Preparation Logs		✓	
Instrument Run Logs	✓		
Internal Laboratory Chain-of-Custory	✓		
Percent Solids Analysis Records	✓		
Reduction Formulae		✓	
Chemist Notebook Pages		✓	

2. HOLDING TIMES

Were all samples analyzed within holding times? Yes **No** N/A

Action: If any holding times were exceeded qualify all affected results as estimated (J for detects and UJ for nondetects).

009

3. INITIAL CALIBRATIONS

Were all instruments calibrated daily, each set-up time and were the proper number of standards used?	Yes	No	N/A
Are the correlation coefficients ≥0.995?	Yes	No	N/A
Was a balance check conducted prior to the TDS analysis?	Yes	No	N/A
Was the titrant normality checked?	Yes	No	N/A

ACTION: Qualify all data as unusable (R) if reported from an analysis in which the above criteria were not met.

4. INITIAL AND CONTINUING CALIBRATION VERIFICATION

Have ICV and CCV been analyzed at the proper frequency?	Yes	No	N/A
Are ICV and CCV percent recoveries within control?	Yes	No	N/A
Are there calculation errors?	Yes	No	N/A

ACTION: Qualify all affected data in accordance with the validation requirements.

5. LABORATORY BLANKS

Are target analytes present in the laboratory blanks?	Yes	No	N/A

ACTION: Qualify all associated sample results for any analyte <5 times the amount in any laboratory blank as nondetected (U) and list the affected samples and analytes below.

6. FIELD BLANKS

Are target analytes present in the field blanks?	Yes	No	N/A

ACTION: Qualify all sample results for any analyte <5 times the amount in any valid field blank as nondetected (U).

7. MATRIX SPIKE SAMPLE ANALYSIS

Are spike recoveries within the acceptance limits?	Yes	No	N/A

ACTION: If the sample concentration exceeds the spike concentration by a factor of 4 or more, and spike recoveries are outside the acceptance limits, no qualification is necessary. If spike recovery is outside the control limits and the sample results are >CRQL, qualify the data as estimated (J). If the spike recovery is <30% and the sample results are less then the IDL qualify the data as unusable (R).

8. LABORATORY CONTROL SAMPLE

Are percent recoveries within the acceptance limits? Yes No N/A

Are there calculation errors? Yes No N/A

ACTION: Qualify the affected results according to the following requirements:

AQUEOUS LCS - Qualify as estimated (J), all sample results > IDL, for which the LCS %R falls within the range 50-79% or > 120%. Qualify as estimated (UJ), all sample results < IDL, for which the LCS falls within the range of 50-79%. Qualify as unusable (R) all sample results, for which the LCS %R < 50%.

SOLID LCS - Qualify as estimated (J), all sample results > IDL for which the LCS %R is outside the established control limits. Qualify as estimated (UJ), all sample results < IDL for which the LCS %R are lower than the established control limits.

9. PERFORMANCE AUDIT ANALYSES

Are the performance audit sample results within the acceptance limits? Yes No N/A

ACTION: Note the results of the performance audit samples in the validation narrative.

10. DUPLICATE SAMPLE ANALYSIS

Are RPD values within the acceptance limits? Yes No N/A

Action: Qualify the results for all associated samples of the same matrix as estimated (J) if the RPD falls outside the acceptance limits.

11. FIELD DUPLICATE SAMPLES

Do RPD values exceed the acceptance limits? Yes No N/A

ACTION: Note the results of the field duplicate samples in the validation narrative.

12. FIELD SPLIT SAMPLES

Do RPD values exceed the acceptance limits? Yes No N/A

ACTION: Note the results of the field split samples in the validation narrative.

13. ANALYTE QUANTITATION AND DETECTION LIMITS

Have results been reported and calculated correctly?	Yes	No	N/A
Are instrument detection limits below the CRDL?	Yes	No	N/A

Action: If analyte quantitation is in error, contact the laboratory for explanation. If errors or deficiencies can not be resolved with the laboratory, qualify associated data as unusable (R).

14. OVERALL ASSESSMENT AND SUMMARY

Has the laboratory conducted the analysis in accordance with the analytical SOW?	Yes	No	N/A
Were project specific data quality objectives met for this analysis?	Yes	No	N/A

ACTION: Summarize all the data qualifications and complete the data validation narrative as specified in Section 10.0 of the data validation requirements.

HOLDING TIME SUMMARY - FORM B-1

SSS 10-6-92

SDG: 9103R844 ~~9110L175~~	REVIEWER: S Schulolt	DATE: 10-6-92	PAGE 1 OF 1

COMMENTS:

FIELD SAMPLE ID	ANALYSIS TYPE	DATE SAMPLED	DATE PREPARED	DATE ANALYZED	PREP. HOLDING TIME, DAYS	ANALYSIS HOLDING TIME, DAYS	QUALIFIER
B00F41	alk	3-4-91	3-13-91	3-13-91	9	9	none
B00F56	↓	↓	↓	↓	↓	↓	↓
B00FF2	↓	↓	↓	↓	↓	↓	↓
B00F41,56,F2	Cl, F, SO_4 by IC	3-4-91	3-11-91	3-11-91	7	7	↓
↓	NO_2, NO_3, PO_4 by IC	3-4-91	3-11-91	3-11-91	↓	↓	J
↓	Hardness	↓	3-11-91	3-11-91	↓	↓	none
↓	$NO_3 + NO_2$	↓	3-26-91	3-26-91	22	22	↓
↓	NH_3	↓	3-21-91	3-21-91	17	17	↓
↓	TOC	↓	4-1-91	4-1-91	27	27	↓
↓	pH	↓	3-8-91	3-8-91	4	4	↓
↓	SO_4	↓	3-29-91	3-29-91	25	25	↓
↓	Sp. Cond	↓	3-20-91	3-20-91	16	16	↓
↓	TDS	↓	3-8-91	3-8-91	4	4	↓
B00F41,56,F2	CN	3-4-91	3-16-91	3-16-91	12	12	✓

013

1031844

Custody Transfer Record/Lab Work Request

Page 1 of 1

010

nt: Westinghouse Hanford
Final Proj. Sampling Date:
k Order #: 61168-03-01-0000
ect Contact/Phone #:
Project Manager: Josie King
CLP Del CLP TAT 3 Day
e Rec'd 3/7/91 Date Due 4/11/91
ount #: WS-HANFORD

Refrigerator #

#/Type Container																		
	Liquid	3/G	2/G	→		1/P	1/P	1/G	1/G	1/P	1/P	1/P	1/P	1/P				
	Solid																	
Volume	Liquid	40ml	950	→		250	1L	250	1L	1L	500	1L						
	Solid																	
Preservatives		None	None	→		None	HCL	None	None	None	None	None						

ANALYSES REQUESTED →

Lab ID	Client ID/Description	Matrix QC Chosen (✓)	Matrix	Date Collected	ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	ORGANIC Herb	RAD Water	Tot. Uranium	Tritium	TOC	INORG Metal	INORG CN	Anions	TC	TC	
					1030H	0608SH	0608SH		ISUB	ISUB	ISUB	IDCT	Tot Rad Rad Sel	ICWD	See Below	See Below	See Below	
001	B00 F41		W	3/4/91	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
2	B00 F42												✓	✓				
3	B00 F56				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
4	F57												✓	✓				
5	FC1				✓													
6	FF2				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		
7	FF3												✓					

MATRIX TYPES: Soil, Sediment, Solid, Sludge, Water, Oil, Air, Drum Solids, Drum Liquids, EP/TCLP Leachate, Wipe, Other, Fish

*RAD = Gross Alpha, Beta, Radium, Sr-90, Tc-99, Cs-137, Co-60
** Metals - HSL + BI, SR, SN

*** Anions - ICL ICFI, ICSO4, ICPO4, ICNO3, ICNO2

**** Inorganic PH, TCD, AIKI, TDS,

***** Inorganic Nitrate, Nitrite, NH3

Special Instructions:

DATE/REVISIONS:
1
2
3
4
5
6

WESTON Analytics Use Only

Samples were: 1) Shipped ___ or Hand Delivered ___ Airbill # 2426159043 2426159054
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
[illegible]	[illegible]	3-7-91	11:32	[illegible]	[illegible]	3-7-91	3:36 pm
[illegible]	[illegible]	3-7-91	11:35 am				

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

Ref# Cooler#

21 21 001-A 8/90 L372 L373 L375 L377 L378 G77-596a

WESTON

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 03-07-91
RFW #: 9103L844
W.O. #: 6168-02-01

INORGANIC NARRATIVE

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

1. Sample holding times as required by 40CFR136 were met for water samples with the exception of anions and pH, which were received past hold.

2. Preparation blank results were below the required detection limit with the exception of alkalinity.

3. All laboratory control standards (blank spikes) were within the control limits of 80-120%. All %RPD were within the 20% guidance limit.

4. All calibration verification checks are within the required control limits of 85-115%. Calibration verification is performed using independent standards.

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

6. All replicate results were within the 20% RPD guidance limits and are summarized on the Inorganic Precision report contained within this document.

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

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

4/17/91
Date

pas.21\i3-844

9713512.1585

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOOF41	Alkalinity	90.0	MG/L	2.0
		Chloride by IC	11.3	mg/L	2.5
		Fluoride by IC	1.1	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	30.8	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	42.9	mg/L	2.5
		Hardness	104	MG/L	2.0
		Nitrate Nitrite	6.8	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.8	PH UNITS	0.10
		Sulfate	40.1	MG/L	10.0
		Specific Conductance	345	UMHOS/CM	1.0
		Total Dissolved Solids	239	MG/L	5.0
-003	BOOF56	Alkalinity	98.0	MG/L	2.0
		Chloride by IC	7.2	mg/L	0.25
		Fluoride by IC	0.77	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	51.8	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	39.5	mg/L	2.5
		Hardness	138	MG/L	2.0
		Nitrate Nitrite	12.0	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	1.3	MG/L	0.50
		pH	7.7	PH UNITS	0.10
		Sulfate	37.2	MG/L	10.0
		Specific Conductance	396	UMHOS/CM	1.0
		Total Dissolved Solids	261	MG/L	5.0
-006	BOOFF2	Alkalinity	104	MG/L	2.0
		Chloride by IC	4.7	mg/L	0.25
		Fluoride by IC	0.89	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	14.4	mg/L	2.5
		Cyanide, Total	10.0 u	UG/L	10.0

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-006	BOOFF2	Phosphate by IC	0.25 u	mg/L	0.25
		Sulfate by IC	22.3	mg/L	2.5
		Hardness	102	MG/L	2.0
		Nitrate Nitrite	3.4	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.8	PH UNITS	0.10
		Sulfate	20.3	MG/L	5.0
		Specific Conductance	392	UMHOS/CM	1.0
		Total Dissolved Solids	194	MG/L	5.0

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
BLANK10	91LAL004-MB1	Alkalinity	0.50 u	MG/L	0.50
BLANK20	91LAL004-MB2	Alkalinity	0.50 u	MG/L	0.50
BLANK30	91LAL004-MB3	Alkalinity	0.50	MG/L	0.50
BLANK40	91LAL004-MB4	Alkalinity	0.50	MG/L	0.50
BLANK50	91LAL004-MB5	Alkalinity	2.0 u	MG/L	2.0
BLANK60	91LAL004-MB6	Alkalinity	2.0 u	MG/L	2.0
BLANK1	91LIC12-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	91LC102-MB1	Cyanide, Total	10.0 u	UG/L	10.0
BLANK10	91LHD004-MB1	Hardness	1.0 u	MG/L	1.0
BLANK20	91LHD004-MB2	Hardness	1.0 u	MG/L	1.0

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK30	91LHD004-MB3	Hardness	1.0	u	MG/L	1.0
BLANK10	91LNO110-MB1	Nitrate Nitrite	0.10	u	MG/L	0.10
BLANK10	91LAM035-MB1	Ammonia, as N	0.10	u	MG/L	0.10
BLANK20	91LAM035-MB2	Ammonia, as N	0.10	u	MG/L	0.10
BLANK30	91LAM035-MB3	Ammonia, as N	0.10	u	MG/L	0.10
BLANK10	91LTC053-MB1	Total Organic Carbon	0.50	u	MG/L	0.50
BLANK10	91LS4018-MB1	Sulfate	5.0	u	MG/L	5.0
BLANK20	91LS4018-MB2	Sulfate	5.0	u	MG/L	5.0
BLANK30	91LS4018-MB3	Sulfate	5.0	u	MG/L	5.0
BLANK10	91LSP024-MB1	Specific Conductance	1.0	u	UMHOS/CM	1.0

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK20	91LSP024-MB2	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK30	91LSP024-MB3	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK40	91LSP024-MB4	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK10	91LSS020-MB1	Total Dissolved Solids	5.0	u	MG/L	5.0

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ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
-001	BOOF41	Total Organic Carbon	5.9	0.50u	5.0	118
		Total Organic Carbon	6.0	0.50u	5.0	120
-003	BOOF56	Sulfate	58.0	37.2	20.0	104
-006	BOOFF2	Ammonia, as N	0.94	0.10u	1.0	93.7
BLANK10	91LAL004-MB1	Alkalinity	104	0.50u	100	104
BLANK20	91LAL004-MB2	Alkalinity	100	0.50u	100	100
BLANK30	91LAL004-MB3	Alkalinity	104	0.50	100	104
BLANK40	91LAL004-MB4	Alkalinity	104	0.50	100	104
BLANK50	91LAL004-MB5	Alkalinity	100	2.0 u	100	100
BLANK60	91LAL004-MB6	Alkalinity	102	2.0 u	100	102
BLANK1	91LIC12-MB1	Chloride by IC	5.5	0.25u	5.0	111
		Chloride by IC MSD	5.5	0.25u	5.0	110
		Fluoride by IC	10.8	0.50u	10.0	108
		Fluoride by IC MSD	10.8	0.50u	10.0	108
		Nitrite by IC	5.3	0.25u	5.0	107
		Nitrite by IC MSD	5.3	0.25u	5.0	107
		Nitrate by IC	5.7	0.25u	5.0	113
		Nitrate by IC MSD	5.6	0.25u	5.0	112
		Phosphate by IC	5.6	0.25u	5.0	113
		Phosphate by IC MSD	5.7	0.25u	5.0	114
		Sulfate by IC	5.6	0.25u	5.0	111
		Sulfate by IC MSD	5.6	0.25u	5.0	111

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK10	91LHD004-MB1	Hardness	100	1.0 u	100	100
BLANK20	91LHD004-MB2	Hardness	100	1.0 u	100	100
		Hardness MSD	70.5	1.0 u	70.5	100
BLANK30	91LHD004-MB3	Hardness	102	1.0 u	100	102
BLANK10	91LNO110-MB1	Nitrate Nitrite	0.42	0.10u	0.40	105
		Nitrate Nitrite MSD	0.41	0.10u	0.40	102
BLANK10	91LAM035-MB1	Ammonia, as N	0.20	0.10u	0.20	100
BLANK20	91LAM035-MB2	Ammonia, as N	1.0	0.10u	1.0	102
BLANK30	91LAM035-MB3	Ammonia, as N	9.6	0.10u	10.0	96.5
BLANK10	91LTC053-MB1	Total Organic Carbon	4.7	0.50u	5.0	94.2
		Total Organic Carbon	4.8	0.50u	5.0	96.1
BLANK10	91LS4018-MB1	Sulfate	20.8	5.0 u	20.0	104
		Sulfate	20.9	5.0 u	20.0	105
BLANK20	91LS4018-MB2	Sulfate	20.5	5.0 u	20.0	103

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ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK30	91LS4018-MB3	Sulfate	20.3	5.0 u	20.0	102
BLANK10	91LSP024-MB1	Specific Conductance	143	1.0 u	147	97.3
BLANK20	91LSP024-MB2	Specific Conductance	686	1.0 u	718	95.6
BLANK30	91LSP024-MB3	Specific Conductance	1410	1.0 u	1410	99.9
BLANK40	91LSP024-MB4	Specific Conductance	685	1.0 u	718	95.4

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ROY F. WESTON INC.

INORGANICS DUPLICATE SPIKE REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
-001	BOOF41	Total Organic Carbon	118	120	1.8
BLANK1	91LIC12-MB1	Chloride by IC	111	110	0.40
		Fluoride by IC	108	108	0.10
		Nitrite by IC	107	107	0.30
		Nitrate by IC	113	112	1.3
		Phosphate by IC	113	114	1.2
		Sulfate by IC	111	111	0.10
LCS2	91LC102-LC2	Cyanide, Total LCS	97.5	99.3	1.8
BLANK20	91LHD004-MB2	Hardness	100	100	0.30
BLANK10	91LNO110-MB1	Nitrate Nitrite	105	102	2.3
BLANK10	91LTC053-MB1	Total Organic Carbon	94.2	96.1	2.1
BLANK10	91LS4018-MB1	Sulfate	104	105	0.30

ROY F. WESTON INC.

INORGANICS PRECISION REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-001REP	BOOF41	Total Organic Carbon	0.50u	0.50u	NC
		pH	7.8	7.8	0.51
-003REP	BOOF56	Sulfate	37.2	37.2	0.00
-006REP	BOOFF2	Ammonia, as N	0.10u	0.10u	NC

9713512.1595

ROY F. WESTON INC.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 04/03/91

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	91LC102-LC1	Cyanide, Total LCS	97.5	100	UG/L	97.5
LCS2	91LC102-LC2	Cyanide, Total LCS	99.3	100	UG/L	99.3

9713512.1596

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
WESTINGHOUSE HANFORD

DATE RECEIVED: 03/07/91 RFW LOT # :9103L844

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOOF41						
ALKALINITY	001	W	91LAL004	03/04/91	03/13/91	03/13/91
CHLORIDE BY IC	001	W	91LIC12	03/04/91	03/11/91	03/11/91
FLUORIDE BY IC	001	W	91LIC12	03/04/91	03/11/91	03/11/91
NITRITE BY IC	001	W	91LIC12	03/04/91	03/11/91	03/11/91
NITRATE BY IC	001	W	91LIC12	03/04/91	03/11/91	03/11/91
TOTAL CYANIDE	001	W	91LC102	03/04/91	03/16/91	03/16/91
PHOSPHATE BY IC	001	W	91LIC12	03/04/91	03/11/91	03/11/91
SULFATE BY IC	001	W	91LIC12	03/04/91	03/11/91	03/11/91
HARDNESS	001	W	91LHD004	03/04/91	03/11/91	03/11/91
NITRATE NITRITE	001	W	91LNO110	03/04/91	03/26/91	03/26/91
AMMONIA	001	W	91LAM035	03/04/91	03/21/91	03/21/91
TOTAL ORGANIC CARBON	001	W	91LTC053	03/04/91	04/01/91	04/01/91
TOTAL ORGANIC CARBON	001 REP	W	91LTC053	03/04/91	04/01/91	04/01/91
TOTAL ORGANIC CARBON	001 MS	W	91LTC053	03/04/91	04/01/91	04/01/91
TOTAL ORGANIC CARBON	001 MSD	W	91LTC053	03/04/91	04/01/91	04/01/91
PH	001	W	91LPH033	03/04/91	03/08/91	03/08/91
PH	001 REP	W	91LPH033	03/04/91	03/08/91	03/08/91
SULFATE	001	W	91LS4018	03/04/91	03/29/91	03/29/91
SPECIFIC CONDUCTANCE	001	W	91LSP024	03/04/91	03/20/91	03/20/91
SUB-OUT TEST FOR SUB	001	W		03/04/91		
TOTAL DISSOLVED SOLI	001	W	91LSS020	03/04/91	03/08/91	03/09/91
BOOF56						
ALKALINITY	003	W	91LAL004	03/04/91	03/13/91	03/13/91
CHLORIDE BY IC	003	W	91LIC12	03/04/91	03/11/91	03/11/91
FLUORIDE BY IC	003	W	91LIC12	03/04/91	03/11/91	03/11/91
NITRITE BY IC	003	W	91LIC12	03/04/91	03/11/91	03/11/91
NITRATE BY IC	003	W	91LIC12	03/04/91	03/11/91	03/11/91
TOTAL CYANIDE	003	W	91LC102	03/04/91	03/16/91	03/16/91
PHOSPHATE BY IC	003	W	91LIC12	03/04/91	03/11/91	03/11/91
SULFATE BY IC	003	W	91LIC12	03/04/91	03/11/91	03/11/91
HARDNESS	003	W	91LHD004	03/04/91	03/11/91	03/11/91
NITRATE NITRITE	003	W	91LNO110	03/04/91	03/26/91	03/26/91
AMMONIA	003	W	91LAM035	03/04/91	03/21/91	03/21/91
TOTAL ORGANIC CARBON	003	W	91LTC053	03/04/91	04/01/91	04/01/91
PH	003	W	91LPH033	03/04/91	03/08/91	03/08/91

9713512.1597

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
WESTINGHOUSE HANFORD

DATE RECEIVED: 03/07/91 RFW LOT # :9103L844

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SULFATE	003	W	91LS4018	03/04/91	03/29/91	03/29/91
SULFATE	003 REP	W	91LS4018	03/04/91	03/29/91	03/29/91
SULFATE	003 MS	W	91LS4018	03/04/91	03/29/91	03/29/91
SPECIFIC CONDUCTANCE	003	W	91LSP024	03/04/91	03/20/91	03/20/91
SUB-OUT TEST FOR SUB	003	W		03/04/91		
TOTAL DISSOLVED SOLI	003	W	91LSS020	03/04/91	03/08/91	03/09/91
BOOFF2						
ALKALINITY	006	W	91LAL004	03/04/91	03/13/91	03/13/91
CHLORIDE BY IC	006	W	91LIC12	03/04/91	03/11/91	03/11/91
FLUORIDE BY IC	006	W	91LIC12	03/04/91	03/11/91	03/11/91
NITRITE BY IC	006	W	91LIC12	03/04/91	03/11/91	03/11/91
NITRATE BY IC	006	W	91LIC12	03/04/91	03/11/91	03/11/91
TOTAL CYANIDE	006	W	91LC102	03/04/91	03/16/91	03/16/91
PHOSPHATE BY IC	006	W	91LIC12	03/04/91	03/11/91	03/11/91
SULFATE BY IC	006	W	91LIC12	03/04/91	03/11/91	03/11/91
HARDNESS	006	W	91LHD004	03/04/91	03/11/91	03/11/91
NITRATE NITRITE	006	W	91LNO110	03/04/91	03/26/91	03/26/91
AMMONIA	006	W	91LAM035	03/04/91	03/21/91	03/21/91
AMMONIA	006 REP	W	91LAM035	03/04/91	03/21/91	03/21/91
AMMONIA	006 MS	W	91LAM035	03/04/91	03/21/91	03/21/91
TOTAL ORGANIC CARBON	006	W	91LTC053	03/04/91	04/01/91	04/01/91
PH	006	W	91LPH033	03/04/91	03/08/91	03/08/91
SULFATE	006	W	91LS4018	03/04/91	03/29/91	03/29/91
SPECIFIC CONDUCTANCE	006	W	91LSP024	03/04/91	03/20/91	03/20/91
SUB-OUT TEST FOR SUB	006	W		03/04/91		
TOTAL DISSOLVED SOLI	006	W	91LSS020	03/04/91	03/08/91	03/09/91

LAB QC:

ALKALINITY	MB1	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB1 BS	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB2	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB2 BS	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB3	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB3 BS	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB4	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB4 BS	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB5	W	91LAL004	N/A	03/13/91	03/13/91

9713512.1598

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
WESTINGHOUSE HANFORD

DATE RECEIVED: 03/07/91 RFW LOT # :9103L844

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
ALKALINITY	MB5 BS	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB6	W	91LAL004	N/A	03/13/91	03/13/91
ALKALINITY	MB6 BS	W	91LAL004	N/A	03/13/91	03/13/91
CHLORIDE BY IC	MB1	W	91LIC12	N/A	03/11/91	03/11/91
CHLORIDE BY IC	MB1 BS	W	91LIC12	N/A	03/11/91	03/11/91
CHLORIDE BY IC	MB1 BSD	W	91LIC12	N/A	03/11/91	03/11/91
FLUORIDE BY IC	MB1	W	91LIC12	N/A	03/11/91	03/11/91
FLUORIDE BY IC	MB1 BS	W	91LIC12	N/A	03/11/91	03/11/91
FLUORIDE BY IC	MB1 BSD	W	91LIC12	N/A	03/11/91	03/11/91
NITRITE BY IC	MB1	W	91LIC12	N/A	03/11/91	03/11/91
NITRITE BY IC	MB1 BS	W	91LIC12	N/A	03/11/91	03/11/91
NITRITE BY IC	MB1 BSD	W	91LIC12	N/A	03/11/91	03/11/91
NITRATE BY IC	MB1	W	91LIC12	N/A	03/11/91	03/11/91
NITRATE BY IC	MB1 BS	W	91LIC12	N/A	03/11/91	03/11/91
NITRATE BY IC	MB1 BSD	W	91LIC12	N/A	03/11/91	03/11/91
PHOSPHATE BY IC	MB1	W	91LIC12	N/A	03/11/91	03/11/91
PHOSPHATE BY IC	MB1 BS	W	91LIC12	N/A	03/11/91	03/11/91
PHOSPHATE BY IC	MB1 BSD	W	91LIC12	N/A	03/11/91	03/11/91
SULFATE BY IC	MB1	W	91LIC12	N/A	03/11/91	03/11/91
SULFATE BY IC	MB1 BS	W	91LIC12	N/A	03/11/91	03/11/91
SULFATE BY IC	MB1 BSD	W	91LIC12	N/A	03/11/91	03/11/91
TOTAL CYANIDE	LC1 L	W	91LC102	N/A	03/16/91	03/16/91
TOTAL CYANIDE	LC2 L	W	91LC102	N/A	03/16/91	03/16/91
TOTAL CYANIDE	MB1	W	91LC102	N/A	03/16/91	03/16/91
HARDNESS	MB1	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB1 BS	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB2	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB2 BS	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB2 BSD	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB3	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB3 BS	W	91LHD004	N/A	03/11/91	03/11/91
NITRATE NITRITE	MB1	W	91LNO110	N/A	03/26/91	03/26/91
NITRATE NITRITE	MB1 BS	W	91LNO110	N/A	03/26/91	03/26/91
NITRATE NITRITE	MB1 BSD	W	91LNO110	N/A	03/26/91	03/26/91
AMMONIA	MB1	W	91LAM035	N/A	03/21/91	03/21/91
AMMONIA	MB1 BS	W	91LAM035	N/A	03/21/91	03/21/91
AMMONIA	MB2	W	91LAM035	N/A	03/21/91	03/21/91
AMMONIA	MB2 BS	W	91LAM035	N/A	03/21/91	03/21/91
AMMONIA	MB3	W	91LAM035	N/A	03/21/91	03/21/91
AMMONIA	MB3 BS	W	91LAM035	N/A	03/21/91	03/21/91

9713512.1599

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
WESTINGHOUSE HANFORD

DATE RECEIVED: 03/07/91 RFW LOT # :9103L844

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
TOTAL ORGANIC CARBON	MB1	W	91LTC053	N/A	04/01/91	04/01/91
TOTAL ORGANIC CARBON	MB1 BS	W	91LTC053	N/A	04/01/91	04/01/91
TOTAL ORGANIC CARBON	MB1 BSD	W	91LTC053	N/A	04/01/91	04/01/91
SULFATE	MB1	W	91LS4018	N/A	03/29/91	03/29/91
SULFATE	MB1 BS	W	91LS4018	N/A	03/29/91	03/29/91
SULFATE	MB1 BSD	W	91LS4018	N/A	03/29/91	03/29/91
SULFATE	MB2	W	91LS4018	N/A	03/29/91	03/29/91
SULFATE	MB2 BS	W	91LS4018	N/A	03/29/91	03/29/91
SULFATE	MB3	W	91LS4018	N/A	03/29/91	03/29/91
SULFATE	MB3 BS	W	91LS4018	N/A	03/29/91	03/29/91
SPECIFIC CONDUCTANCE	MB1	W	91LSP024	N/A	03/20/91	03/20/91
SPECIFIC CONDUCTANCE	MB1 BS	W	91LSP024	N/A	03/20/91	03/20/91
SPECIFIC CONDUCTANCE	MB2	W	91LSP024	N/A	03/20/91	03/20/91
SPECIFIC CONDUCTANCE	MB2 BS	W	91LSP024	N/A	03/20/91	03/20/91
SPECIFIC CONDUCTANCE	MB3	W	91LSP024	N/A	03/20/91	03/20/91
SPECIFIC CONDUCTANCE	MB3 BS	W	91LSP024	N/A	03/20/91	03/20/91
SPECIFIC CONDUCTANCE	MB4	W	91LSP024	N/A	03/20/91	03/20/91
SPECIFIC CONDUCTANCE	MB4 BS	W	91LSP024	N/A	03/20/91	03/20/91
TOTAL DISSOLVED SOLI	MB1	W	91LSS020	N/A	03/08/91	03/09/91
TOTAL SUSPENDED SOLI	MB1	W	91LSS020	N/A	03/08/91	03/09/91

9713512.1600

OSM ORGANIC DATA ASSESSMENT

DATE 8/12/91

REVIEWED BY M.A. Beck for MAB 10/12/91

LABORATORY Weston

~~CASE #~~ ZFW # 91031844

SDG # N/A

SAMPLES/MATRIX B00F41 ____ ____
B00F56 ____ ____
B00FF2 ____ ____
B00FC1 ____ ____
water ____ ____

DATA ASSESSMENT SUMMARY

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

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

OVERALL ASSESSMENT: no unusable Data, all results acceptable w/qualification

NOTES : none

Refer to the corresponding attachments for explanation of any problems.

ok to transmit

10/12/91

9713512.1601

ORGANIC QC - Holding Times

Name Mark G Beck MGB Date 8/8 was 12/91

COMMENTS: VOA - all samples met holding time requirements
SemiVOA - all sample and blanks met extraction criteria.
Pest - all samples and blanks met extraction time and analysis time criteria

ACTION: VOA - none SemiVOA - none Pest/PCB - non

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

9713512.1602

ORGANIC QC - Surrogate Recovery

Name Mark u Beck mdb Date 8/12/89

COMMENTS: VOA - All surrogates for all samples and blank met acceptable limits for surrogate recovery. Semi VOA - All samples blanks and blank spike had acceptable surrogate recovery. Pest/PCB - The surrogate recovery limits were met for all samples.

ACTION: VOA - none Semi VOA - none. Pest/PCB - none

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

9713512.1603

ORGANIC QC - MS/MSD

Name Mark O. Beck MOB Date 8/12/91

COMMENTS: VOA - matrix spike from RCI # 91026746, a WHC water sample, so any matrix effects should be similar. Semivolat - The "matrix spike" is in fact a blank spike, but as the samples are water this should not cause major problems. Star, phenol and pentachlorophenol are all acceptable, phenol high, and pentachlorophenol biased low. all other are within acceptable limits. Pest/PCB - a blank (water) spike was used

ACTION: VOA - matrix spike acceptable - no action ~~Semi~~ SemiVOA - no action MS/MSD advisory, except not above. - Pest/PCB - no action endrin recovery 1% higher than upper limit.

Endr was recov slight high. all oth 9 recove and 9 k were ok.

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

ORGANIC QC - Blanks

Name Mark A Beck mab, Date 8/12/91

COMMENTS: VOA - one blank run for all samples. This blank (91LV037-1) contained the contaminants carbon disulfide, methylene chloride and acetone. SemiVOA - no appropriate blank was performed, blank contained contaminants butyl benzyl phthalate and non-target compounds. Pest/PCB - a blank was performed for all samples. No contaminants detected.

ACTION: VOA - qualified all CS_2, acetone, and methylene chloride results as undetected (U). SemiVOA - Blank manually contaminated qualified all samples and constituents found in blank as (U) undetected. Pest/PCB - no action or qualification needed.

sample #	constituent	value/qual
all	VOA	
	carbon disulfide	U
	acetone	U
	methylene chloride	U
	semiVOA	
all	N-N,(-)-nitrosodiphenylamine	U
	Di-n-Butylphthalate	U
	bis(2-Ethylhexyl) phthalate	U
TIC	unknown retention time	
	8.38	U
all	12.33	
semiVOA	21.95	
TICs	22.82	
	23.00	
	24.02	
	25.13	
	26.33	

sample #	constituent	value/qual
	retention time	
all	25.53	U
semi	25.78	
VOA	26.02	
TIC	26.27	
	27.27	
	28.00	
	30.67	
	34.02	U

9713512.1605

ORGANIC QC - GC/MS Tune

Name Mark O. Beck MOB. Date 8/12/91

COMMENTS: VOA - Appropriate GC/MS Tunes have been performed and all tunes met acceptance ~~ste~~ criteria. Semi VOA - Semi VOA - All GC/MS tunes performed, and tunes ~~met~~ met acceptance criteria.

ACTION: VOA - none. Semi VOA - none

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

9713512.1606

ORGANIC QC - Calibrations

Name Mark C Peck MD Date 8/12/91

COMMENTS: VOA - all initial and continuing calibrations met acceptance criteria. Semi-VOA - all initial and continuing calibration checks met acceptance criteria. Pest/PCB - Initial linearity check ok for all analytes. The analytical sequence conforms to protocol requirements. All continuing calibration factor % D met acceptance criteria

ACTION: VOA - none. Sem VOA - none. Pest/PCB - none.

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

9713512.1607

ORGANIC QC - Internal Standards

Name Mark Beckwith Date 8/12/91

COMMENTS: VOA - internal standard retention time and standard area criteria were met. Semivolatile standards and samples met both retention time and standard area acceptance criteria.

ACTION: VOA - none Semivolatile - none

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

9713512.1608

ORGANIC QC - Instrument Performance (pest)

Name Mark G. Beck MDB Date 8/12/91

COMMENTS: DDT retention times were 7.12 min for all standards reported on Form IV. Endrin and DDT breakdown never exceeded 15%. Evalmix A 90 never exceeded acceptance criteria. All standards were within retention time windows.

ACTION: none - none needed

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

9713512.1609

ORGANIC QC - Other

Name Mark G. Reed MGR. Date 8/12/91

COMMENTS: VOA - matrix spike not from the same RFW #, but was water, as were the samples. Semi VOA - massive contamination of unknowns in blanks. Pest/PCB - no problems.

ACTION: VOA - none. Semi VOA - none except to note that identification of TIC's not at all certain. Pest/PCB - none.

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

1A

VOLATILE ORGANICS ANALYSIS SHEET

9715912.1610

CLIENT SAMPLE NO.

BOOFF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-006

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

Lab File ID: W031407

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	17	~~B~~ 4
67-64-1	Acetone	~~8~~ 10	~~JB~~ 4
75-15-0	Carbon Disulfide	~~4~~ 5	~~JB~~ 4
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOFF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-006

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

Lab File ID: W031407

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

FORM 1 VOA-TIC

12/88 Rev.

1A

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOOFC1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-005

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

Lab File ID: W031406

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	16	~~B~~ 4
67-64-1	Acetone	22	~~B~~ 4
75-15-0	Carbon Disulfide	~~2~~ 5	~~JB~~ 4
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	1	J
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOFC1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-005

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

Lab File ID: W031406

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

MJH 9/29

1A

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOOF56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: W031405

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	~~B~~ 4
67-64-1	Acetone	~~5~~ 10	~~JB~~ 4
75-15-0	Carbon Disulfide	~~2~~ 5	~~JB~~ 4
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

FORM 1 V-1 12/88 Rev.

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOF56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: W031405

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

FORM 1 VOA-TIC 12/88 Rev.

1A

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOOF41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-001

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

Lab File ID: W031404

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOOF41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-001

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

Lab File ID: W031404

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____

Date Analyzed: 03/14/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

FORM 1 VOA-TIC 12/88 Rev.

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000089

CLIENT SAMPLE NO.

BOOFF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-006

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

Lab File ID: V040503

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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

MAP 6/2/91

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000090

CLIENT SAMPLE NO.

B00FF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L844-006

Sample wt/vol: 990 (g/mL) ML Lab File ID: V040503

Level: (low/med) LOW Date Received: 03/07/91

% Moisture: not dec. _____ dec. Date Extracted: 03/11/91

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

(1) - Cannot be separated from Diphenylamine

FORM 1 SV-2 12/88 Rev.

MAB 4/22/91

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000091

CLIENT SAMPLE NO.

BOOFF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-006

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

Lab File ID: V040503

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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: 22

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.68	100	J
2.	UNKNOWN	12.42	5	J
3.	TRIETHYLENE GLYCOL	13.70	10	J
4.	UNKNOWN	~~21.97~~	~~30~~	~~JB~~ 4
5.	UNKNOWN	~~22.82~~	~~50~~	~~JB~~ 4
6.	UNKNOWN	~~23.00~~	~~90~~	~~JB~~ 4
7.	UNKNOWN	23.78	4	J
8.	UNKNOWN	23.90	10	J
9.	UNKNOWN	~~24.02~~	~~20~~	~~JB~~ 4
10.	UNKNOWN	24.42	5	J
11.	UNKNOWN	~~25.18~~	~~3000~~	~~JB~~ 4
12.	UNKNOWN	~~25.35~~	~~60~~	~~JB~~ 4
13.	UNKNOWN	~~25.62~~	~~90~~	~~JB~~ 4
14.	UNKNOWN	~~25.78~~	~~60~~	~~JB~~ 4
15.	UNKNOWN	25.92	10	J
16.	UNKNOWN	~~26.02~~	~~70~~	~~JB~~ 4
17.	UNKNOWN	~~26.27~~	~~10~~	~~JB~~ 4
18.	UNKNOWN	26.73	10	J
19.	UNKNOWN	27.25	60	J
20.	UNKNOWN	~~28.07~~	~~40~~	~~JB~~
21.	UNKNOWN	~~30.67~~	~~20~~	~~JB~~ 4
22.	UNKNOWN	30.95	6	J

MO.
6/22/91

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000053

CLIENT SAMPLE NO.

B00F56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: V040422

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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

mah 5/22/91

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000054

CLIENT SAMPLE NO.

B00F56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: V040422

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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

(1) - Cannot be separated from Diphenylamine

FORM 1 SV-2

12/88 Rev.

JMG 5/22/91

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000055

CLIENT SAMPLE NO.

BOOF56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L844-003

Sample wt/vol: 990 (g/mL) ML Lab File ID: V040422

Level: (low/med) LOW Date Received: 03/07/91

% Moisture: not dec. _____ dec. Date Extracted: 03/11/91

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: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	~~8.42~~	~~40~~	~~JB~~ U
2.	UNKNOWN	12.33	5	~~JB~~ U
3.	UNKNOWN	21.95	10	~~JB~~ U
4.	UNKNOWN	22.80	20	~~JB~~ U
5.	UNKNOWN	~~22.98~~	~~40~~	~~JB~~ U
6.	UNKNOWN	23.90	7	J
7.	UNKNOWN	~~24.00~~	~~10~~	~~JB~~ U
8.	UNKNOWN	24.42	7	J
9.	UNKNOWN	~~25.15~~	~~3000~~	~~JB~~ U
10.	UNKNOWN	25.33	80	~~JB~~ U
11.	UNKNOWN	25.60	90	~~JB~~ U
12.	UNKNOWN	~~25.77~~	~~60~~	~~JB~~ U
13.	UNKNOWN	25.90	20	J
14.	UNKNOWN	~~26.02~~	~~70~~	~~JB~~ U
15.	UNKNOWN	26.25	10	~~JB~~ U
16.	UNKNOWN	27.25	80	~~JB~~ U
17.	UNKNOWN	28.07	50	~~JB~~ U
18.	UNKNOWN	~~30.65~~	~~20~~	~~JB~~ U
19.	UNKNOWN	38.63	20	J

mab
8/22/91

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000017

CLIENT SAMPLE NO.

B00F41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L844-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: V040421

Level: (low/med) LOW Date Received: 03/07/91

% Moisture: not dec. _____ dec. Date Extracted: 03/11/91

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

FORM 1 SV-1 12/88 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000018

CLIENT SAMPLE NO.

B00F41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L844-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: V040421

Level: (low/med) LOW Date Received: 03/07/91

% Moisture: not dec. _____ dec. Date Extracted: 03/11/91

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

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
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	~~JB~~ 4
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	~~2~~ 10	~~JB~~ 4
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	~~8~~ 10	~~JB~~ 4
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

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000019

CLIENT SAMPLE NO.

BOOF41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-001

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

Lab File ID: V040421

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/11/91

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: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	~~8.43~~	~~70~~	~~JB~~ U
2.	TRIETHYLENE GLYCOL	13.63	9	J
3.	UNKNOWN	~~21.93~~	~~20~~	~~JB~~ U
4.	UNKNOWN	~~22.80~~	~~30~~	~~JB~~ U
5.	UNKNOWN	~~22.98~~	~~60~~	~~JB~~ U
6.	UNKNOWN	23.88	10	J
7.	UNKNOWN	~~23.98~~	~~20~~	~~JB~~ U
8.	UNKNOWN	24.40	7	J
9.	UNKNOWN	~~25.15~~	~~4000~~	~~JB~~ U
10.	UNKNOWN	25.33	80	~~JB~~ U
11.	UNKNOWN	25.58	100	~~JB~~ U
12.	UNKNOWN	25.77	80	~~JB~~ U
13.	UNKNOWN	26.00	80	~~JB~~ U
14.	UNKNOWN	26.25	20	~~JB~~ U
15.	UNKNOWN	26.72	10	~~J~~ U
16.	UNKNOWN	27.25	70	~~JB~~ U
17.	UNKNOWN	28.07	40	~~JB~~ U
18.	UNKNOWN	30.65	20	~~JB~~ U
19.	UNKNOWN	~~34.00~~	~~20~~	~~JB~~ U

JMG 5/22/

9713512.1627

ID 0000012

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOOF41

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L844-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: 04149103.27

Level: (low/med) LOW Date Received: 03/07/91

% Moisture: not dec. _____ dec. Date Extracted: 03/08/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/16/91

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

JC 6/6/91

FORM 1 PEST 12/88 Rev.

mab. 8/12/91

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PESTICIDE ORGANICS ANALYSIS SHEET 0000017

CLIENT SAMPLE NO.

BOOF56

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L844-003

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

Lab File ID: 04149103.28

Level: (low/med) LOW

Date Received: 03/07/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/08/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/16/91

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

KL 6/6/91

FORM 1 PEST 12/88 Rev.

M.A.B. 8/12/91

9113512.1629

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PESTICIDE ORGANICS ANALYSIS SHEET 0000022

CLIENT SAMPLE NO.

BOOFF2

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L844-006

Sample wt/vol: 990 (g/mL) ML Lab File ID: 04149103.29

Level: (low/med) LOW Date Received: 03/07/91

% Moisture: not dec. _____ dec. Date Extracted: 03/08/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/16/91

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

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6/6/91

FORM 1 PEST 12/88 Rev.

MAB
6/12/91

9713512.1630

Westinghouse Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 11/16/91

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

RPW# 9103L844

SAMPLES/MATRIX B00F41

B00F56

B00FF2

all water

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Alkalinity	Anions IC[1]	Hardness
1. Holding Time		O	X	O
2. Blanks		X	O	O
3. Spike Recovery		O	O	O
4. Duplicates		NE	O	O
5.				
6.				
7.				
8.				
9.				
10.				

O = data had no problems
X = data qualified due to minor problems
M = data qualified due to major problems/some data may be unusable
NE - not evaluated

OVERALL ASSESSSMENT: all results acceptable w/attached qualifiers

NOTES: disregard CN results - reported & validated by CLP proc.

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

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

9713512.1631

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (pg 2)

DATE 11/16/91 SAMPLES/MATRIX See Cover

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

ZFW# 91032844

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	NO_2/NO_3	Ammonia	TOC
1. Holding Time		O	O	O
2. Blanks		O	O	O
3. Spike Recovery		O	O	O
4. Duplicates		O	O	O
5.				
6.				
7.				
8.				
9.				
10.				

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

OVERALL ASSESSSMENT: See Cover

NOTES: See Cover

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

9713512.1632

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (pg 3)

DATE 11/16/91

SAMPLES/MATRIX See cover

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

RFW# 9103L844

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Sulfate	Conductance	TDS
1. Holding Time		O	O	O
2. Blanks		O	O	O
3. Spike Recovery		O	O	N/A
4. Duplicates		O	NE	NE
5.				
6.				
7.				
8.				
9.				
10.				

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

OVERALL ASSESSSMENT: See cover

NOTES: See Cover

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

9713512.1633

RCRA LEVEL C QC

Name JA Lerch Date 11/16/91

QC Check: Holding Time

COMMENTS: nitrite, nitrate, phosphate hold times exceeded; all other hold time criteria met

ACTION: qualify associated results as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	nitrite	UJ			
	nitrate	J			
	phosphate	UJ			

9713512:1634

RCRA LEVEL C QC

Name JA Lerch Date 11/16/91

QC Check: Blanks

COMMENTS: contamination present in alkalinity blanks @ report limit
-all other blanks free of contamination

ACTION: qualify associated results per OSM guidelines

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

9713512.1635

RCRA LEVEL C QC

Name JA Lerch Date 11/16/91

QC Check: Spike Recovery

COMMENTS: B00F41 - TOC MS recovery within limits; B00F56 - sulfat MS recovery ok; B00FF2 - ammonia MS recovery ok
- all other blank spike recoveries within limits
(TDS N/A)

ACTION: none

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

9713512.1636

RCRA LEVEL C QC

Name JA Lerch Date 11/16/91

QC Check: Duplicates

COMMENTS: B00F41-TOC MS/MSD % diff within limits; Anions, hardness, NO_2/NO_3, TOC, sulfate - all BS/BSD % diff ok; B00F41-TOC replicate % Diff ok B00F56-sulfate rep. % Diff ok; B00FF2-ammonia rep % Diff ok

ACTION: none

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

9713512.1637

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/03/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOOF41	Alkalinity	90.0	MG/L	2.0
		Chloride by IC	11.3	mg/L	2.5
		Fluoride by IC	1.1	mg/L	0.5
		Nitrite by IC	0.25 uJ	mg/L	0.2
		Nitrate by IC	30.8 J	mg/L	2.5
		~~Cyanide, Total~~	~~10.0 u~~	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.2
		Sulfate by IC	42.9	mg/L	2.5
		Hardness	104	MG/L	2.0
		Nitrate Nitrite	6.8	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.1
		Total Organic Carbon	0.50 u	MG/L	0.5
		pH	7.8	PH UNITS	0.1
		Sulfate	40.1	MG/L	10.0
		Specific Conductance	345	UMHOS/CM	1.0
		Total Dissolved Solids	239	MG/L	5.0
-003	BOOF56	Alkalinity	98.0	MG/L	2.0
		Chloride by IC	7.2	mg/L	0.2
		Fluoride by IC	0.77	mg/L	0.5
		Nitrite by IC	0.25 uJ	mg/L	0.2
		Nitrate by IC	51.8 J	mg/L	2.5
		~~Cyanide, Total~~	~~10.0 u~~	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.2
		Sulfate by IC	39.5	mg/L	2.5
		Hardness	138	MG/L	2.0
		Nitrate Nitrite	12.0	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.1
		Total Organic Carbon	1.3	MG/L	0.5
		pH	7.7	PH UNITS	0.1
		Sulfate	37.2	MG/L	10.0
		Specific Conductance	396	UMHOS/CM	1.0
		Total Dissolved Solids	261	MG/L	5.0
-006	BOOFF2	Alkalinity	104	MG/L	2.0
		Chloride by IC	4.7	mg/L	0.2
		Fluoride by IC	0.89	mg/L	0.5
		Nitrite by IC	0.25 uJ	mg/L	0.2
		Nitrate by IC	14.4 J	mg/L	2.5
		~~Cyanide, Total~~	~~10.0 u~~	UG/L	10.0

JJ 11/16/91

9713512.1638

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/03/91

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

WESTON BATCH #: 3103L844

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-006	BOOFF2	Phosphate by IC	0.25 uJ	mg/L	0.2
		Sulfate by IC	22.3	mg/L	2.5
		Hardness	102	MG/L	2.0
		Nitrate Nitrite	3.4	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.1
		Total Organic Carbon	0.50 u	MG/L	0.5
		pH	7.8	PH UNITS	0.1
		Sulfate	20.3	MG/L	5.0
		Specific Conductance	392	UMHOS/CM	1.0
		Total Dissolved Solids	194	MG/L	5.0

JJ 11/16/91

Westinghouse Hanford Company

9713512.1639

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 10/16/91

REVIEWED BY JA Lerch

LABORATORY Weston

~~CASE #~~ RFW 9103L844 (also contains 9103L869)

SDG # N/A

SAMPLES/MATRIX B00F41 B00FF3 B00FF5 B00F42 B00F50 B00FF6 B00F56 B00F51 B00F63 B00F57 B00F60 B00F64 B00FF2 B00F61 -all water

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	ICP*		
1. Holding time		O		
2. Blanks		O		
3. Matrix Spike		X		
4. Duplicates		O		
5. LCS		O		
6. other QC		O		
7.				
8.				
9.				
10.				

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

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

NOTES: * included are non-TAL metals Bi, Sn, Sr; disregard all other metals results on summary report - validated according to CLP procedure

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

54 7900 046

9715512.1640

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: Holding time

COMMENTS: 6mo holding time req. met for all samples

ACTION: none

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

9715512.1641

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: Blanks

COMMENTS: all blanks free of contamination for Sn, Sr (91L0714-MB1) and Bi (91L0714-MB2)

ACTION: none

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

9713512.1642

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: Matrix Spike

COMMENTS: B00FF2 – Sn, Sr spike recoveries acceptable; Bi spike recovery ok, spike dup recovery low

ACTION: qualify all associated results as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	Bi	UJ			

9713512.1643

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: Duplicates

COMMENTS: B00FF2- Bi, Sn replicate %Diff N/A (both sample + rep results < detection); Sr replicate %D < 21%, no problems

ACTION: none

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

9713512.1644

RCRA LEVEL C QC

Name JA Lerch Date 10/16/91

QC Check: LCS

COMMENTS: all Sn, Sr LCS recoveries ok (91L0714-LC1 + LC2);
all Bi LCS recoveries ok (91L0714-LC3 + LC4)

ACTION: none

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

9713512.1645

RCRA LEVEL C QC

Name JA Kerch Date 10/16/91

QC Check: Other QC

COMMENTS: - all CLP calibration criteria met for RFW 91031844 for ICP analytes; ICV + CCV solutions did not contain Bi, Sn, Sr - no problem

ACTION: none

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

9713512.1646

0000007

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	BOOF41	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	30900		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	70.4		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	308		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5740		UG/L	5000
		Magnesium, Total	9840		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	24900		UG/L	5000
		Nickel, Total	46.4		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	158		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	26.4		UG/L	20.0

10/16/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	BOOF42	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	uJ	UG/L	150
		Calcium, Soluble	31300		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	6270		UG/L	5000
		Magnesium, Soluble	9990		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	25300		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	160		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

JJ 10/16/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-003	BOOF56	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	uJ	UG/L	150
		Calcium, Total	40900		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	22.5		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	5310		UG/L	5000
		Magnesium, Total	12200		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	25100		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	210		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

10/16/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	BOOF57	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	uJ	UG/L	150
		Calcium, Soluble	40900		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	12.0		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	5800		UG/L	5000
		Magnesium, Soluble	12300		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	26500		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	212		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

JJ 10/16/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-006	BOOFF2	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	uJ	UG/L	150
		Calcium, Total	25000		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	29.0		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	185		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	7680		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	12400		UG/L	5000
		Nickel, Total	48.7		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	130		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	36.2		UG/L	20.0

10/16/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L844

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-007	BOOFF3	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	uJ	UG/L	150
		Calcium, Soluble	30500		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	0.28		UG/L	0.20
		Potassium, Soluble	5550		UG/L	5000
		Magnesium, Soluble	9390		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	15300		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	160		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

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	BOOF50	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	uJ	UG/L	150
		Calcium, Total	29300		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	64.0		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	299		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.2
		Potassium, Total	6180		UG/L	5000
		Magnesium, Total	9580		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	21900		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	155		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.
		Vanadium, Total	50.0	u	UG/L	50.
		Zinc, Total	20.1		UG/L	20.

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	BOOF51	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	uJ	UG/L	150
		Calcium, Soluble	30400		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	0.2
		Potassium, Soluble	5550		UG/L	5000
		Magnesium, Soluble	9930		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	22500		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	160		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.
		Vanadium, Soluble	50.0	u	UG/L	50.
		Zinc, Soluble	20.0	u	UG/L	20.

10/16/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-003	BOOF60	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	uJ	UG/L	150
		Calcium, Total	33700		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	73.5		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	349		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.2
		Potassium, Total	5800		UG/L	5000
		Magnesium, Total	10000		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.
		Sodium, Total	16600		UG/L	5000
		Nickel, Total	42.7		UG/L	40.0
		Lead, Total	3.0	u	UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.
		Selenium, Total	5.0	u	UG/L	5.
		Tin, Total	100	u	UG/L	100
		Strontium, Total	175		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.
		Vanadium, Total	50.0	u	UG/L	50.
		Zinc, Total	23.4		UG/L	20.

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	BOOF61	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	uJ	UG/L	150
		Calcium, Soluble	32000		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	0.2
		Potassium, Soluble	5230		UG/L	5000
		Magnesium, Soluble	9530		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	15900		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	167		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	36.0		UG/L	20.0

JJ 10/16/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	BOOFF5	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	uJ	UG/L	150
		Calcium, Total	38300		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	167		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	1210		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.2
		Potassium, Total	5250		UG/L	5000
		Magnesium, Total	11900		UG/L	5000
		Manganese, Total	23.3		UG/L	15.0
		Sodium, Total	22400		UG/L	5000
		Nickel, Total	81.9		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	191		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

JJ 10/16/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTIN LIMIT
-006	BOOFF6	Silver, Soluble	10.0	u	UG/L	10.
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.0	u	UG/L	10.
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.
		Bismuth, Soluble	150	u	UG/L	150
		Calcium, Soluble	37500		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.
		Cobalt, Soluble	50.0	u	UG/L	50.
		Chromium, Soluble	10.0	u	UG/L	10.
		Copper, Soluble	25.0	u	UG/L	25.
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0
		Potassium, Soluble	5330		UG/L	5000
		Magnesium, Soluble	11700		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15
		Sodium, Soluble	22000		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40
		Lead, Soluble	5.2		UG/L	3
		Antimony, Soluble	60.0	u	UG/L	60
		Selenium, Soluble	5.0	u	UG/L	5
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	188		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10
		Vanadium, Soluble	50.0	u	UG/L	50
		Zinc, Soluble	37.5		UG/L	20

JJ 10/10/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-008	BOOF63	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	29200		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	48.4		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	1910		UG/L	100
		Mercury, Total	0.28		UG/L	0.20
		Potassium, Total	6120		UG/L	5000
		Magnesium, Total	8580		UG/L	5000
		Manganese, Total	24.9		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	148		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	37.9		UG/L	20.0

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-006	BOOFF6	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	uJ	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.
		Copper, Soluble	25.0	u	UG/L	25.
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.
		Potassium, Soluble	5330		UG/L	5000
		Magnesium, Soluble	11700		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.
		Sodium, Soluble	22000		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.
		Lead, Soluble	5.2		UG/L	3.
		Antimony, Soluble	60.0	u	UG/L	60.
		Selenium, Soluble	5.0	µ	UG/L	5.
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	188		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.
		Vanadium, Soluble	50.0	u	UG/L	50.
		Zinc, Soluble	37.5		UG/L	20.

10/16/91

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-008	BOOF63	Silver, Total	10.0	u	UG/L	10.
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.
		Bismuth, Total	150	uJ	UG/L	150
		Calcium, Total	29200		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.
		Cobalt, Total	50.0	u	UG/L	50.
		Chromium, Total	48.4		UG/L	10.
		Copper, Total	25.0	u	UG/L	25.
		Iron, Total	1910		UG/L	100
		Mercury, Total	0.28		UG/L	0.
		Potassium, Total	6120		UG/L	5000
		Magnesium, Total	8580		UG/L	5000
		Manganese, Total	24.9		UG/L	15.
		Sodium, Total	23500		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.
		Lead, Total	3.0	u	UG/L	3.
		Antimony, Total	60.0	u	UG/L	60.
		Selenium, Total	5.0	u	UG/L	5.
		Tin, Total	100	u	UG/L	100
		Strontium, Total	148		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.
		Vanadium, Total	50.0	u	UG/L	50.
		Zinc, Total	37.9		UG/L	20.

10/16/91

9713512.1661

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/22/91

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

WESTON BATCH #: 9103L869

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-009	BOOF64	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	uJ	UG/L	150
		Calcium, Soluble	30500		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.
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.
		Potassium, Soluble	6500		UG/L	5000
		Magnesium, Soluble	8930		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.
		Sodium, Soluble	24400		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.
		Lead, Soluble	3.0	u	UG/L	3.
		Antimony, Soluble	60.0	u	UG/L	60.
		Selenium, Soluble	5.0	u	UG/L	5.
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	156		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.
		Vanadium, Soluble	50.0	u	UG/L	50.
		Zinc, Soluble	20.0	u	UG/L	20.

JJ 10/16/91

9713512.1662

OSM INORGANIC DATA ASSESSMENT

DATE 10/12/91

REVIEWED BY JA Lerch

LABORATORY Weston

~~CASE #~~ RFW 91031844 (also contains 91031869)

SDG # —

SAMPLES/MATRIX

B00F41	B00FF3	B00FF5
B00F42	B00F50	B00FF6
B00F56	B00F51	B00F63
B00F57	B00F60	B00F64
B00FF2	B00F61	all water

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN
1. Calibrations (Form II)	O	O	O	O
2. Blanks (III)	X	O	O	O
3. ICS (IV)	X			
4. Matrix Spike (V)	O	M	O	Not Eval.
5. Duplicate Analysis (VI)	X	X	O	Not Eval
6. LCS (VII)	O	O		O
7. Serial Dilution (IX)	O			
8. GFAA		X		
9. Holding Times (XIV)	O	O	O	O
10. Other QC none				

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: Some Se results unusable (R) due to low MS recovery — all other results acceptable w/attached qualification

NOTES: none

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

9713512.1663

INORGANIC QC - ~~ICS~~ Calibrations

Name JA Lerch Date 10/12/91

COMMENTS: all ICV + CCV %R within limits
- analytical sequence ok
- Hg correlation coefficient ok
- CN calibration acceptable

ACTION: none

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

9713512.1664

INORGANIC QC - Blanks

Name J.A. Lerch Date 10/12/91

COMMENTS: Ba, Mg, Ag, Na, V, Zn detected in blank below CRDL

ACTION: qualify associated results as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	V	U			
	Zn	U			
B00FF6	Ag	U			
B00F64					
B00F60					

9713512.1665

INORGANIC QC - ~~Calibrations~~ ICS

Name JA Lerch Date 10/12/91

COMMENTS: - all ICS solution %R within limits
- false positives ~~may~~ exist for Sb, Mn, Na
- false negative may exist for K

ACTION: qualify all associated data as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	Sb	acceptable			
	Na	acceptable			
	K	acceptable			
	Mn	J			
- with the following exceptions					
B00F57		acceptable			

9713512.1666

INORGANIC QC - Matrix Spike

Name JA Lerch Date 10/12/91

COMMENTS: B00F41 - Hg spike recovery within limits
B00FF2 - As, Se recoveries very low (<30%) all other AA + ICP recoveries ok
No spike recoveries reported for CN

ACTION: qualify associated results as per OSM guidelines

sample #	constituent	value/qual
all	As	J
	Se	J
with the following exceptions:		
B00FF3	Se	R
B00F63	Se	R
B00F64	Se	R

sample #	constituent	value/qual

9713512.1667

INORGANIC QC - Duplicate Analysis

Name JA Lerch Date 10/12/91

COMMENTS: B00F41 - Hg RPD N/A sample + dup <IDL
B00FF2 - As, Ca, Cr, Zn dup RPD's high, all other RPD's within applicable limits

ACTION: qualify associated results as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	As	J			
	Ca	acceptable			
	Cr	J			
	Zn	UJ			

9713512.1668

INORGANIC QC - LCS

Name JA Lerch Date 10/12/91

COMMENTS: all LCS results within control limits

ACTION: none

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

9713512.1669

INORGANIC QC - Serial Dilution

Name JA Lecchi Date 10/12/91

COMMENTS: B00FF2 - all dilution results within applicable control limits

ACTION: none

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

9713512.1670

INORGANIC QC - Holding Times

Name JA Lerch Date 10/12/91

COMMENTS: -all holding time reqs met

ACTION: none

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

INORGANIC QC - GFAA

Name JA Lerch Date 10/12/91

COMMENTS: -no MSA req. or performed
-GFAA sequence ok
-analytical spike recoveries low for some samples for Pb, Se, As, Tl (see below)

ACTION: qualify associated results as per OSM guidelines

sample #	constituent	value/qual
B00F41	Pb	UJ
	Se	J
B00F42	Pb	UJ
B00F56	Pb	UJ
	Se	J
B00F57	Pb	UJ
	Se	J
B00FF2	Pb	UJ
	Se	J
B00FF3	Pb	UJ
	Se	UJ ~~R~~ (previously qual R)
B00F50	Pb	UJ
	Tl	UJ
B00F51	Pb	UJ
	Tl	UJ
B00F60	Pb	UJ
B00F61	Pb	UJ

sample #	constituent	value/qual
B00FF5	Pb	UJ
B00FF6	Pb	J
	Se	J
B00G3	As	J
	Pb	J
	Se	UJ (previously qual. R
B00F64	Pb	J
	Se	UJ (previously qual. R

9713512.1672

INORGANIC QC - other

Name JA Lerch Date 10/12/91

COMMENTS: none

ACTION: —

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

9713512.1673 0000038

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF41

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844001

Level (low/med): LOW Date Received:03/07/91

% 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	3.50	~~B~~	J	F
7440-39-3	Barium	37.8	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30900			P
7440-47-3	Chromium	70.4	J		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	308			P
7439-92-1	Lead	2.00	~~B~~	W UJ	F
7439-95-4	Magnesium	9840			P
7439-96-5	Manganese	7.00	~~B~~	J	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	46.4			P
7440-09-7	Potassium	5740			P
7782-49-2	Selenium	2.20	~~B~~	W J	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	24900			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	38.0	~~B~~	U	P
7440-66-6	Zinc	26.4	UJ		P
	Cyanide	5.00	U		C

10/15/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1674

0000039

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF42

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844002

Level (low/med): LOW Date Received:03/07/91

% 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	4.00	B	J	F
7440-39-3	Barium	36.9	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	31300			P
7440-47-3	Chromium	5.20	B	J	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	51.3	B		P
7439-92-1	Lead	2.00	B	W UJ	F
7439-95-4	Magnesium	9990			P
7439-96-5	Manganese	2.10	B	J	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6270			P
7782-49-2	Selenium	1.70	B	J	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	25300			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	37.0	B	UJ	P
7440-66-6	Zinc	7.20	B	UJ	P
	Cyanide				

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF56

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844003

Level (low/med): LOW Date Received:03/07/91

% 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	5.90	B	J	F
7440-39-3	Barium	34.8	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	40900			P
7440-47-3	Chromium	22.5	J		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	82.5	B		P
7439-92-1	Lead	2.00	B	W UJ	F
7439-95-4	Magnesium	12200			P
7439-96-5	Manganese	2.10	B	J	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	9.50	B		P
7440-09-7	Potassium	5310			P
7782-49-2	Selenium	2.50	B	W J	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	25100			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	36.6	B	U	P
7440-66-6	Zinc	14.2	B	UJ	P
	Cyanide	8.72	U		C

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1676

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF57

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844004

Level (low/med): LOW Date Received:03/07/91

% 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	5.40	B	J	F
7440-39-3	Barium	35.5	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	40900			P
7440-47-3	Chromium	12.0	J		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.3	B		P
7439-92-1	Lead	2.00	U	W UJ	F
7439-95-4	Magnesium	12300			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5800			P
7782-49-2	Selenium	3.00	B	W J	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	26500			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	37.8	B	U	P
7440-66-6	Zinc	16.4	B	UJ	P
	Cyanide				

10/6/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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0000042

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF2

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844006

Level (low/med): LOW Date Received:03/07/91

% 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	4.80	B	N J	F
7440-39-3	Barium	30.2	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	25000		*	P
7440-47-3	Chromium	29.0	J	*	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	8.80	B		P
7439-89-6	Iron	185			P
7439-92-1	Lead	2.00	U	W UJ	F
7439-95-4	Magnesium	7680			P
7439-96-5	Manganese	6.20	B	U	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	48.7			P
7440-09-7	Potassium	3920	B		P
7782-49-2	Selenium	1.30	B	WN J	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	12400			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	29.2	B	U	P
7440-66-6	Zinc	36.2	UJ	*	P
	Cyanide	5.00	U		C

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1678

0000043

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF3

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103844007

Level (low/med): LOW Date Received:03/07/91

% 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	3.90	~~B~~	N J	F
7440-39-3	Barium	36.3	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30500		*	P
7440-47-3	Chromium	3.20	~~B~~	* J	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	8.10	B		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	2.00	~~U~~	W UJ	F
7439-95-4	Magnesium	9390			P
7439-96-5	Manganese	4.10	~~B~~	U	P
7439-97-6	Mercury	0.278			CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5550			P
7782-49-2	Selenium	1.00	~~U~~	NW R	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	15300			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	34.2	~~B~~	U	P
7440-66-6	Zinc	19.0	~~B~~	* UJ	P
	Cyanide				

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1679

0000044

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF50

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869001

Level (low/med): LOW Date Received:03/08/91

% 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	4.60	B	J	F
7440-39-3	Barium	37.6	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	29300			P
7440-47-3	Chromium	64.0	J		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	299			P
7439-92-1	Lead	2.00	U	W UJ	F
7439-95-4	Magnesium	9580			P
7439-96-5	Manganese	6.90	B	J	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	34.1	B		P
7440-09-7	Potassium	6180			P
7782-49-2	Selenium	1.00	J		F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	21900			P
7440-28-0	Thallium	5.00	U	W UJ	F
7440-62-2	Vanadium	41.3	B	U	P
7440-66-6	Zinc	20.1	UJ		P
	Cyanide	5.00	U		C

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9713512.1680

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF51

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869002

Level (low/med): LOW Date Received:03/08/91

% 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	5.60	B	J	F
7440-39-3	Barium	39.1	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30400			P
7440-47-3	Chromium	5.20	B	J	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	B	W UJ	F
7439-95-4	Magnesium	9930			P
7439-96-5	Manganese	2.30	B	J	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5550			P
7782-49-2	Selenium	1.20	B	J	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	22500			P
7440-28-0	Thallium	5.00	B	W UJ	F
7440-62-2	Vanadium	41.6	B	U	P
7440-66-6	Zinc	15.0	B	UJ	P
	Cyanide				

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF60

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869003

Level (low/med): LOW Date Received:03/08/91

% 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	6.30	B	J	F
7440-39-3	Barium	39.1	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	33700			P
7440-47-3	Chromium	73.5	J		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	12.5	B		P
7439-89-6	Iron	349			P
7439-92-1	Lead	2.00	U	W UJ	F
7439-95-4	Magnesium	10000			P
7439-96-5	Manganese	9.70	B	J	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	42.7			P
7440-09-7	Potassium	5800			P
7782-49-2	Selenium	1.10	B	J	F
7440-22-4	Silver	4.20	B	U	P
7440-23-5	Sodium	16600			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	45.1	B	U	P
7440-66-6	Zinc	23.4	UJ		P
	Cyanide	5.00	U		C

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF61

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869004

Level (low/med): LOW Date Received:03/08/91

% 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	5.90	B	J	F
7440-39-3	Barium	36.5	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32000			P
7440-47-3	Chromium	5.40	B	J	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	43.9	B		P
7439-92-1	Lead	2.00	B	W UJ	F
7439-95-4	Magnesium	9530			P
7439-96-5	Manganese	2.10	B	J	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5230			P
7782-49-2	Selenium	1.20	B	J	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	15900			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	43.0	B	U	P
7440-66-6	Zinc	36.0	U		P
	Cyanide				

JL 10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF5

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869005

Level (low/med): LOW Date Received:03/08/91

% 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	6.00	B	J	F
7440-39-3	Barium	34.4	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	38300			P
7440-47-3	Chromium	167	J		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	14.8	B		P
7439-89-6	Iron	1210			P
7439-92-1	Lead	2.00	B	W UJ	F
7439-95-4	Magnesium	11900			P
7439-96-5	Manganese	23.3	J		P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	81.9			P
7440-09-7	Potassium	5250			P
7782-49-2	Selenium	1.30	B	J	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	22400			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	42.3	B	U	P
7440-66-6	Zinc	6.40	B	UJ	P
	Cyanide	7.95	U		C

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOFF6

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869006

Level (low/med): LOW Date Received:03/08/91

% 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	6.50	B	J	F
7440-39-3	Barium	33.4	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	7.90	B	J	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	53.6	B		P
7439-92-1	Lead	5.20	J	W	F
7439-95-4	Magnesium	11700			P
7439-96-5	Manganese	5.90	B	J	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	8.40	B		P
7440-09-7	Potassium	5330			P
7782-49-2	Selenium	2.00	B	W J	F
7440-22-4	Silver	4.50	B	U	P
7440-23-5	Sodium	22000			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	41.9	B	U	P
7440-66-6	Zinc	37.5	U		P
	Cyanide				

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF63

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869008

Level (low/med): LOW Date Received:03/08/91

% 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	6.80	B	W J	F
7440-39-3	Barium	31.2	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	29200			P
7440-47-3	Chromium	48.4	J		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	9.40	B		P
7439-89-6	Iron	1910			P
7439-92-1	Lead	2.60	B	W J	F
7439-95-4	Magnesium	8580			P
7439-96-5	Manganese	24.9	J		P
7439-97-6	Mercury	0.278			CV
7440-02-0	Nickel	24.6	B		P
7440-09-7	Potassium	6120			P
7782-49-2	Selenium	1.00	U	W R	F
7440-22-4	Silver	4.00	U		P
7440-23-5	Sodium	23500			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	44.0	B	U	P
7440-66-6	Zinc	37.9	UJ		P
	Cyanide	5.00	U		C

JJ 10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

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U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

BOOF64

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

Lab Code:WESTON Case No:WEST SAS No.: SDG No.:CLP844

Matrix (soil/water):WATER Lab Sample ID:9103869009

Level (low/med): LOW Date Received:03/08/91

% 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	5.80	B	J	F
7440-39-3	Barium	30.8	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	30500			P
7440-47-3	Chromium	7.50	B	J	P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	55.1	B		P
7439-92-1	Lead	2.90	B	W	F
7439-95-4	Magnesium	8930			P
7439-96-5	Manganese	6.30	B	J	P
7439-97-6	Mercury	0.200	U		CV
7440-02-0	Nickel	7.80	B		P
7440-09-7	Potassium	6500			P
7782-49-2	Selenium	1.00	U	W R	F
7440-22-4	Silver	4.10	B	U	P
7440-23-5	Sodium	24400			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	42.7	B	U	P
7440-66-6	Zinc	12.7	B	UJ	P
	Cyanide				

10/16/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN