7110L.712

0045588 Page 1 of 1

START

9/03/29/3-WESC-022

Client: Westinghouse Hanford
Est. Final Proj. Sampling Date:
Work Order #: 6168-02-01-0000
Project Contact/Phone #:
AD Project Manager: Gary King / P Beaty
QC: CLP Del: CLP TAT: 35 day
Date Rec'd: 3/13/91 Date Due: 4/17/91
Account #: W.S. HANFORD

Refrigerator #:
#/Type Container: Liquid 3/G 1/G 1/G 1/P 1/P 1/G 1/G 1/P 1/P 1/P 1/P 1/P
Solid
Volume: Liquid 1L 1L 1L 1L 1L 1L 500 125 1L 1L 1L 1L 1L
Solid
Preservative: Liquid none none HNO3 HCL none HCL none HCL HNO3 DI H2O none H2SO4
Solid

ANALYSES REQUESTED

MATRIX CODES:	Lab ID	Client ID/Description	Matrix QC Chosen (✓)	Matrix	Date Collected	ORGANIC: CS	ORGANIC: BNA	ORGANIC: Pest/PCB	ORGANIC: Herb	ORGANIC: BAD WORK	ORGANIC: Tot Uranium	ORGANIC: Tritium	ORGANIC: TOC	INORG: General Tot Metals	INORG: CN	INORG: Alpha/Beta	INORG: Inorg (1)	INORG: Inorg (2)
						06-30-91	06-30-91	04-08-91		ISOB	ISOB	ISOB	IDCI	Tot Metals SOL Hg+	ECNTO	See Below	See Below	See Below
S - Soil	001	B00F19		W	3/11/91	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
SE - Sediment	2	F80												✓				
SO - Solid	3	F69				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
SL - Sludge	4	F70												✓				
W - Water	5	F6L				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
O - Oil	6	F62												✓				
A - Air	7	F68				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
DS - Drum Solids	8	F69												✓				
DL - Drum Liquids																		
T - EP/TCLP Leachate																		
WI - Wipe																		
X - Other																		
F - Fish																		

Special Instructions:
* PADWORK = (Alpha, Beta, Radium) SR90, CS137, TC90, CO60, PU238, PU239/240
** Metals = HSL + PI, SR, SN
*** Anions = ICCL, ICFL, ICSO4, ICPO4, ICNO3, ICNO2
**** Analyses = PH, SPC, ALKL, TDS, SO4
***** Analyses = HARD, NH3, NO3

DATE/REVISIONS:
1.
2.
3.
4.
5.
6.

OCT 1996 RECEIVED EDMC

WESTON Analytics Use Only

Samples were:
1) Shipped ✓ or Hand Delivered
Airbill # 2122 2723
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)
ICNO3, ICNO2

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'd Y or (N)

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
Connelly	[illegible]	3/13/91	1145				

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

WW 21 21-001-A-8100 L372 L374 L377 L378 Rel# Cooler# 077-506

9610150.0654

N 051

9613500.0655

1A

VOLATILE ORGANICS ANALYSIS SHEET

0000016

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-001

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

Lab File ID: AK3K13

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	B
67-64-1	Acetone	17	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	3	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

9613500.0656

1E

0000017

CLIENT SAMPLE NO.

B00F79

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: 9103L913-001

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

Lab File ID: AK3K13

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

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

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

9613500.0657

0000024

1A

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-003

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: AK3K14

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

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

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

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	JB
67-64-1	Acetone	21	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

9613500.0658 0000025

CLIENT SAMPLE NO.

B00F69

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: 9103L913-003

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

Lab File ID: AK3K14

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

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

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

9613500.0659

000003

1A

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-005

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

Lab File ID: AK3K15

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

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

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

9613500.0660
1E

0000032

CLIENT SAMPLE NO.

B00FG1

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: 9103L913-005

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

Lab File ID: AK3K15

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

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

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

9613500.0661 0000037

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-007

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: AK3K16

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

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

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

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

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

9613500.0662 1E

00000038

CLIENT SAMPLE NO.

B00FF8

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: 9103L913-007

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

Lab File ID: AK3K16

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

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

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

9613500.0663 0000077

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

VBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LVK053-MB1

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

Lab File ID: AK3K03

Level: (low/med) LOW

Date Received: 03/20/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

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

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

9613500.0664 00000078

CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LVK053-MB1

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

Lab File ID: AK3K03

Level: (low/med) LOW

Date Received: 03/20/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

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

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

9613500.0665

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000023

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: V040909

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

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

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

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

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

CAS NO.	COMPOUND		
108-95-2	Phenol	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

9613990.0666

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000024

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: V040909

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

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

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

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	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	2	J
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613500.0667

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000025

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-001

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

Lab File ID: V040909

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/09/91

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

Dilution Factor: 1.00

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.43	5	J
2.	UNKNOWN	22.00	4	J
3.	HYDROCARBON	22.88	5	J
4.	HYDROCARBON	23.07	10	J
5.	UNKNOWN	25.15	500	JB
6.	UNKNOWN	25.70	6	J
7.	UNKNOWN	25.87	7	J
8.	HYDROCARBON	26.42	6	J
9.	UNKNOWN	27.35	10	J
10.	UNKNOWN	28.13	9	J
11.	UNKNOWN	30.75	5	J

9613500.0668

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000048

CLIENT SAMPLE NO.

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-003

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

Lab File ID: V041105

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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

9613580.0669

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000049

CLIENT SAMPLE NO.

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-003

Sample wt/vol: 990 (g/mL) ML Lab File ID: V041105

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

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/11/91

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	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	J
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613500.0670

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000050

CLIENT SAMPLE NO.

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-003

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

Lab File ID: V041105

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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	7.47	4	J
2.	UNKNOWN	7.98	10	J
3.	UNKNOWN	21.18	10	J
4.	UNKNOWN	21.48	6	J
5.	HYDROCARBON	22.35	8	J
6.	UNKNOWN	22.55	20	J
7.	UNKNOWN	24.60	800	JB
8.	HYDROCARBON	24.88	20	J
9.	UNKNOWN	25.15	20	J
10.	UNKNOWN	25.32	10	J
11.	UNKNOWN	25.57	10	J
12.	UNKNOWN	26.82	30	J
13.	UNKNOWN	27.57	20	J
14.	UNKNOWN	30.12	20	J
15.	UNKNOWN	33.23	10	J
16.	HYDROCARBON	37.33	10	J

9613580.0671

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000080

CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-005

Sample wt/vol: 990 (g/mL) ML Lab File ID: V041106

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

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/11/91

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 000081

CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-005

Sample wt/vol: 990 (g/mL) ML Lab File ID: V041106

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

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/11/91

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	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	2	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

9613508.0673

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

3 0 0 0 0 8 2

CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-005

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

Lab File ID: V041106

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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

Dilution Factor: 1.00

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	21.18	10	J
2.	UNKNOWN	24.60	100	JB
3.	UNKNOWN	27.57	6	J
4.	UNKNOWN	30.12	7	J

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-007

Sample wt/vol: 990 (g/mL) ML Lab File ID: V041107

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

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/11/91

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

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

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

9613500.0675

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000099

CLIENT SAMPLE NO.

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-007

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

Lab File ID: V041107

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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	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	1	J
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9613500.0676

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000100

CLIENT SAMPLE NO.

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-007

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

Lab File ID: V041107

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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

Dilution Factor: 1.00

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	TRICHLORO-1-PROPENE	7.82	4	J
2.	UNKNOWN	8.00	10	J
3.	UNKNOWN	11.88	5	J
4.	UNKNOWN	21.18	9	J
5.	UNKNOWN	22.57	4	J
6.	UNKNOWN	24.58	300	JB
7.	UNKNOWN	25.15	6	J
8.	HYDROCARBON	25.32	4	J
9.	UNKNOWN	25.55	4	J
10.	HYDROCARBON	26.80	10	J
11.	UNKNOWN	27.55	10	J
12.	UNKNOWN	30.12	10	J

9613500.0677

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000303

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 91LE0352-MB1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S041812

Level: (low/med) LOW Date Received: 03/14/91

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/18/91

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

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

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

9613500.0678

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000304

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 91LE0352-MB1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S041812

Level: (low/med) LOW Date Received: 03/14/91

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/18/91

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

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

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

(1) - Cannot be separated from Diphenylamine

9613500.0679

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000305

CLIENT SAMPLE NO.

SBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0352-MB1

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

Lab File ID: S041812

Level: (low/med) LOW

Date Received: 03/14/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/18/91

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

Dilution Factor: 1.00

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.88	5	J
2.	UNKNOWN	5.65	5	J
3.	CYCLOHEXANE	9.25	5	J
4.	HYDROCARBON	19.97	30	J

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0352-MB1 BS

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

Lab File ID: S041813

Level: (low/med) LOW

Date Received: 03/14/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/18/91

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

Dilution Factor: 1.00

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

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

S: SPIKE COMPOUND

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

SBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0352-MB1 BS

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

Lab File ID: S041813

Level: (low/med) LOW

Date Received: 03/14/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/18/91

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

Dilution Factor: 1.00

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

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

(1) - Cannot be separated from Diphenylamine

S: SPIKE COMPOUND

9613500.0682

1B

0000327

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

SBLKMSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 91LE0352-MB1 BSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S041607

Level: (low/med) LOW Date Received: 03/14/91

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

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		
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.

9613500.0683

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000328

CLIENT SAMPLE NO.

SBLKMSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0352-MB1 BSD

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

Lab File ID: S041607

Level: (low/med) LOW

Date Received: 03/14/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

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

S: SPIKE COMPOUND

FORM 1 SV-2

12/88 Rev.

9613500.0684

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000335

CLIENT SAMPLE NO.

B00F79MS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-001 MS

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

Lab File ID: V041103

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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.

9613500.0685

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000336

CLIENT SAMPLE NO.

B00F79MS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-001 MS

Sample wt/vol: 990 (g/mL) ML Lab File ID: V041103

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

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/11/91

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)	2	J
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol		S
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	2	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene		S
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	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

S: SPIKE COMPOUND

9613500.0686

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000343

CLIENT SAMPLE NO.

B00F79MSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-001 MSD

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

Lab File ID: V041104

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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.

9613500.0687

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000344

CLIENT SAMPLE NO.

B00F79MSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-001 MSD

Sample wt/vol: 990 (g/mL) ML Lab File ID: V041104

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

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/11/91

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		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	J
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	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

S: SPIKE COMPOUND

FORM 1 SV-2

12/88 Rev.

9613500.0688 0000015

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: 04239113.20

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

% Moisture: not dec. _____ dec. Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/24/91

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

JPB 6/26/91

9613500.0689 0000020 CLIENT SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS SHEET

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-003

Sample wt/vol: 980 (g/mL) ML Lab File ID: 04239113.21

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

% Moisture: not dec. _____ dec. Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/24/91

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

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.051	U
319-85-7	Beta-BHC	0.051	U
319-86-8	Delta-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)	0.051	U
76-44-8	Heptachlor	0.051	U
309-00-2	Aldrin	0.051	U
1024-57-3	Heptachlor epoxide	0.051	U
959-98-8	Endosulfan I	0.051	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.51	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.51	U
5103-74-2	gamma-Chlordane	0.51	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.51	U
11104-28-2	Aroclor-1221	0.51	U
11141-16-5	Aroclor-1232	0.51	U
53469-21-9	Aroclor-1242	0.51	U
12672-29-6	Aroclor-1248	0.51	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JCB 6/26/91

9613500.0690 0000025 CLIENT SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS SHEET

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-005

Sample wt/vol: 990 (g/mL) ML Lab File ID: 04239113.22

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

% Moisture: not dec. _____ dec. Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/24/91

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

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

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

9613500.0691 000003 0 CLIENT SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS SHEET

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-007

Sample wt/vol: 990 (g/mL) ML Lab File ID: 04239113.23

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

% Moisture: not dec. _____ dec. Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/24/91

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

4/26/91

9613500.0692
1D

0000225 CLIENT SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS SHEET

PBLK

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 91LE0356-MB1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 04179113.52

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

% Moisture: not dec. _____ dec. Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/18/91

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

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

JEB 6/26/91

9613500.0693

0000230

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

PBLKMS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0356-MB1 BS

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

Lab File ID: 04179113.38

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/18/91

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	0.040	J
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

JOB 6/26/91

S: SPIKE COMPOUND

FORM 1 PEST

12/88 Rev.

9613500.0694

0000235

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

PBLKMSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 91LE0356-MB1 BSD

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

Lab File ID: 04179113.41

Level: (low/med) LOW

Date Received: 03/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/18/91

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	0.030	J
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

JB 6/26/91

S: SPIKE COMPOUND

FORM 1 PEST

12/88 Rev.

9613500.0695 000024

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00F69MS

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-003 MS

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

Lab File ID: ~~BLK0608H.01~~ 04039113.30 JF 7/2/91

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/23/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.051	U
319-85-7	Beta-BHC	0.051	U
319-86-8	Delta-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)		S
76-44-8	Heptachlor		S
309-00-2	Aldrin		S
1024-57-3	Heptachlor epoxide	0.051	U
959-98-8	Endosulfan I	0.051	U
60-57-1	Dieldrin		S
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin		S
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		S
72-43-5	Methoxychlor	0.51	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.51	U
5103-74-2	gamma-Chlordane	0.51	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.51	U
11104-28-2	Aroclor-1221	0.51	U
11141-16-5	Aroclor-1232	0.51	U
53469-21-9	Aroclor-1242	0.51	U
12672-29-6	Aroclor-1248	0.51	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JEB 6/26/91

S: SPIKE COMPOUND

FORM 1 PEST

12/88 Rev.

9613500.0696 ID

0000246

CLIENT SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS SHEET

B00F69MSD

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-003 MSD

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

Lab File ID: ~~BLK0608H.01~~ 04239113.31 JF 9/2/91

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/23/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.051	U
319-85-7	Beta-BHC	0.051	U
319-86-8	Delta-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)		S
76-44-8	Heptachlor		S
309-00-2	Aldrin		S
1024-57-3	Heptachlor epoxide	0.051	U
959-98-8	Endosulfan I	0.051	U
60-57-1	Dieldrin		S
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin		S
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		S
72-43-5	Methoxychlor	0.51	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.51	U
5103-74-2	gamma-Chlordane	0.51	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.51	U
11104-28-2	Aroclor-1221	0.51	U
11141-16-5	Aroclor-1232	0.51	U
53469-21-9	Aroclor-1242	0.51	U
12672-29-6	Aroclor-1248	0.51	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JEB 4/26/91

S: SPIKE COMPOUND

FORM 1 PEST

12/88 Rev.

9613500.0697

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	B00F79	Alkalinity	24.0	MG/L	2.0
		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
		Cyanide, Total	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 u	mg/L	0.25
		Sulfate by IC	0.25 u	mg/L	0.25
		Hardness	1.0 u	MG/L	1.0
		Nitrate Nitrite	0.10	MG/L	0.10
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	4.4	PH UNITS	0.10
		Sulfate	5.0 u	MG/L	5.0
		Specific Conductance	593	UMHOS/CM	1.0
		Total Dissolved Solids	5.0 u	MG/L	5.0
-003	B00F69	Alkalinity	144	MG/L	2.0
		Chloride by IC	7.7	mg/L	0.25
		Fluoride by IC	0.51	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	38.3	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	40.4	mg/L	2.5
		Hardness	136	MG/L	2.0
		Nitrate Nitrite	10.6	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.54	MG/L	0.50
		pH	7.4	PH UNITS	0.10
		Sulfate	41.8	MG/L	10.0
		Specific Conductance	351	UMHOS/CM	1.0
		Total Dissolved Solids	269	MG/L	5.0

9613500.0698

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-005	B00FG1	Alkalinity	142	MG/L	2.0
		Chloride by IC	6.2	mg/L	0.25
		Fluoride by IC	1.1	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	20.3	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	43.2	mg/L	2.5
		Hardness	110	MG/L	2.0
		Nitrate Nitrite	5.5	MG/L	1.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	2.7	MG/L	0.50
		pH	7.5	PH UNITS	0.10
		Sulfate	44.1	MG/L	10.0
		Specific Conductance	319	UMHOS/CM	1.0
		Total Dissolved Solids	239	MG/L	5.0
-007	B00FF8	Alkalinity	144	MG/L	2.0
		Chloride by IC	7.7	mg/L	0.25
		Fluoride by IC	0.54	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	38.6	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	41.0	mg/L	2.5
		Hardness	140	MG/L	2.0
		Nitrate Nitrite	10.6	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	3.2	MG/L	0.50
		pH	7.6	PH UNITS	0.10
		Sulfate	53.6	MG/L	10.0
		Specific Conductance	353	UMHOS/CM	1.0
		Total Dissolved Solids	261	MG/L	5.0

9613500.0699

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
-001	B00F79	Nitrate Nitrite	0.85	0.10	1.0	75.1
		Nitrate Nitrite MSD	0.85	0.10	1.0	75.1
-005	B00FG1	Sulfate	72.4	44.1	20.0	141

9613500.0700

ROY F. WESTON INC.

INORGANICS DUPLICATE SPIKE REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
-001	B00F79	Nitrate Nitrite	75.1	75.1	0.00
BLANK1	91LIC13-MB1	Chloride by IC	92.4	91.9	0.50
		Fluoride by IC	91.9	99.6	8.1
		Nitrite by IC	99.0	103	4.3
		Nitrate by IC	101	100	0.10
		Phosphate by IC	99.9	99.6	0.30
		Sulfate by IC	99.2	99.5	0.40
LCS2	91LC115-LC2	Cyanide, Total LCS	96.8	97.4	0.62
BLANK10	91LHD006-MB1	Hardness	100	101	0.90
BLANK10	91LNO115-MB1	Nitrate Nitrite	106	106	0.00
BLANK10	91LAM029-MB1	Ammonia, as N	97.0	102	5.0
BLANK30	91LAM029-MB3	Ammonia, as N	98.0	103	5.0
BLANK10	91LTC057-MB1	Total Organic Carbon	92.3	96.0	4.0
BLANK10	91LS4020-MB1	Sulfate	105	105	0.50

9613500.0701

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
BLANK10	91LAL006-MB1	Alkalinity	0.50 u	MG/L	0.50
BLANK20	91LAL006-MB2	Alkalinity	0.50 u	MG/L	0.50
BLANK30	91LAL006-MB3	Alkalinity	2.0 u	MG/L	2.0
BLANK40	91LAL006-MB4	Alkalinity	2.0 u	MG/L	2.0
BLANK50	91LAL006-MB5	Alkalinity	2.0 u	MG/L	2.0
BLANK1	91LIC13-MB1	Chloride by IC	0.56	mg/L	0.25
		Fluoride by IC	0.50 u	mg/L	0.50
		Nitrite by IC	0.25 u	mg/L	0.25
		Nitrate by IC	0.25 u	mg/L	0.25
		Phosphate by IC	0.25 u	mg/L	0.25
		Sulfate by IC	0.25 u	mg/L	0.25
BLANK1	91LC115-MB1	Cyanide, Total	10.0 u	UG/L	10.0
BLANK10	91LHD006-MB1	Hardness	1.0 u	MG/L	1.0
BLANK20	91LHD006-MB2	Hardness	1.0 u	MG/L	1.0
BLANK10	91LNO115-MB1	Nitrate Nitrite	0.10 u	MG/L	0.10

9613500.0702

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
BLANK10	91LAM029-MB1	Ammonia, as N	0.10 u	MG/L	0.10
BLANK20	91LAM029-MB2	Ammonia, as N	0.10 u	MG/L	0.10
BLANK30	91LAM029-MB3	Ammonia, as N	0.10 u	MG/L	0.10
BLANK10	91LTC057-MB1	Total Organic Carbon	0.50 u	MG/L	0.50
BLANK20	91LTC057-MB2	Total Organic Carbon	0.50 u	MG/L	0.50
BLANK30	91LTC057-MB3	Total Organic Carbon	0.50 u	MG/L	0.50
BLANK10	91LS4020-MB1	Sulfate	5.0 u	MG/L	5.0
BLANK20	91LS4020-MB2	Sulfate	5.0 u	MG/L	5.0
BLANK10	91LSP020-MB1	Specific Conductance	1.0 u	UMHOS/CM	1.0
BLANK20	91LSP020-MB2	Specific Conductance	1.0 u	UMHOS/CM	1.0

9613500.0703

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK30	91LSP020-MB3	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK40	91LSP020-MB4	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK50	91LSP020-MB5	Specific Conductance	1.0	u	UMHOS/CM	1.0
BLANK10	91LSS024-MB1	Total Dissolved Solids	5.0	u	MG/L	5.0

9613500.0704

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
-007	B00FF8	Hardness	342	140	200	101
BLANK10	91LAL006-MB1	Alkalinity	100	0.50u	100	100
BLANK20	91LAL006-MB2	Alkalinity	100	0.50u	100	100
BLANK30	91LAL006-MB3	Alkalinity	100	2.0 u	100	100
BLANK40	91LAL006-MB4	Alkalinity	100	2.0 u	100	100
BLANK50	91LAL006-MB5	Alkalinity	96.0	2.0 u	100	96.0
BLANK1	91LIC13-MB1	Chloride by IC	5.2	0.56	5.0	92.4
		Chloride by IC MSD	5.2	0.56	5.0	91.9
		Fluoride by IC	9.2	0.50u	10.0	91.9
		Fluoride by IC MSD	10	0.50u	10.0	99.6
		Nitrite by IC	4.9	0.25u	5.0	99.0
		Nitrite by IC MSD	5.2	0.25u	5.0	103
		Nitrate by IC	5.0	0.25u	5.0	101
		Nitrate by IC MSD	5.0	0.25u	5.0	100
		Phosphate by IC	5.0	0.25u	5.0	99.9
		Phosphate by IC MSD	5.0	0.25u	5.0	99.6
		Sulfate by IC	5.0	0.25u	5.0	99.2
		Sulfate by IC MSD	5.0	0.25u	5.0	99.5
BLANK10	91LHD006-MB1	Hardness	100	1.0 u	100	100
		Hardness MSD	110	1.0 u	109	101
BLANK20	91LHD006-MB2	Hardness	100	1.0 u	100	100
BLANK10	91LNO115-MB1	Nitrate Nitrite	0.42	0.10u	0.40	106
		Nitrate Nitrite MSD	0.42	0.10u	0.40	106

9613500.0705

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK10	91LAM029-MB1	Ammonia, as N	0.19	0.10u	0.20	97.0
		Ammonia, as N MSD	1.0	0.10u	1.0	102
BLANK20	91LAM029-MB2	Ammonia, as N	10.1	0.10u	10.0	101
BLANK30	91LAM029-MB3	Ammonia, as N	0.20	0.10u	0.20	98.0
		Ammonia, as N MSD	10.3	0.10u	10.0	103
BLANK10	91LTC057-MB1	Total Organic Carbon	4.6	0.50u	5.0	92.3
		Total Organic Carbon	4.8	0.50u	5.0	96.0
BLANK20	91LTC057-MB2	Total Organic Carbon	4.7	0.50u	5.0	94.2
BLANK30	91LTC057-MB3	Total Organic Carbon	4.7	0.50u	5.0	94.2
BLANK10	91LS4020-MB1	Sulfate	21.0	5.0 u	20.0	105
		Sulfate	21.1	5.0 u	20.0	105
BLANK20	91LS4020-MB2	Sulfate	20.5	5.0 u	20.0	102
BLANK10	91LSP020-MB1	Specific Conductance	143	1.0 u	147	97.3
BLANK20	91LSP020-MB2	Specific Conductance	633	1.0 u	718	88.2

9613500.0706

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 04/12/91

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9103L913

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
BLANK30	91LSP020-MB3	Specific Conductance	1340	1.0 u	1410	94.7
BLANK40	91LSP020-MB4	Specific Conductance	672	1.0 u	718	93.6
BLANK50	91LSP020-MB5	Specific Conductance	693	1.0 u	718	96.5

9613500.0707

ROY F. WESTON INC.

INORGANICS PRECISION REPORT 04/12/91

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9103L913

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-001REP	B00F79	Nitrate Nitrite	0.10	0.10	0.00
		Total Dissolved Solids	5.0 u	5.0 u	NC
-003REP	B00F69	Specific Conductance	351	353	0.57

9613500.0708

ROY F. WESTON INC.

INORGANICS PRECISION REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-005REP	B00FG1	Sulfate	44.1	44.5	0.72
-007REP	B00FF8	Hardness	140	140	0.14

9613500.0709

ROY F. WESTON INC.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 04/12/91

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

9613500.0710

0000134

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F79

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

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

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

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

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	92.0	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	U	N	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium	1.50	B		F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	277	B		P
7440-28-0	Thallium	5.00	U	W	F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	17.5	B		P
	Cyanide	5.00	U		C

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9613500.0711

0000135

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F80

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

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

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

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

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	92.0	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	U	N	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	1010	U		P
7782-49-2	Selenium	1.50	B		F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	71.0	U		P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	10.9	B		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9613500.0712

0000136

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F69

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9613500.0713

0000137

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F70

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9613500.0714

0000138

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FG1

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FG2

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.0716

0000140

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FF8

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9613500.0717

0000141

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FF9

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9613500.0718

0000142

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FC5

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9613500.0719

0000143

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FC6

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

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

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

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

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	8.90	B		F
7440-39-3	Barium	37.2	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	37500			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	7.80		W	F
7439-95-4	Magnesium	11500			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	U	N	CV
7440-02-0	Nickel	11.1	B		P
7440-09-7	Potassium	4870	B		P
7782-49-2	Selenium	2.80	B	W	F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	21500			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	30.5	B		P
7440-66-6	Zinc	3.00	U		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F85

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.0721

0000145

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F86

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

9613500.0722

134

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F79

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

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

Matrix (soil/water): WATER Lab Sample ID: 910391301

Level (low/med): LOW Date Received: 3/13/91

% 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	2.00	U		F
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	92.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	84.00	U		P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	1010.00	U		P
7782-49-2	Selenium	1.50	B		F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	277.00	B		P
7440-28-0	Thallium	5.00	U	W	F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	17.50	B		P
	Cyanide	5.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.0723

135

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F80

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

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

Matrix (soil/water): WATER Lab Sample ID: 910391302

Level (low/med): LOW Date Received: 3/13/91

% 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	2.00	U		F
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	92.00	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	84.00	U		P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	1010.00	U		P
7782-49-2	Selenium	1.50	B		F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	71.00	U		P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	10.90	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.

B00F69

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

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

Matrix (soil/water): WATER Lab Sample ID: 910391303

Level (low/med): LOW Date Received: 3/13/91

% 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	9.70	B		F
7440-39-3	Barium	32.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	38200.00			P
7440-47-3	Chromium	29.30			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	214.00			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	11900.00			P
7439-96-5	Manganese	6.00	B		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	11.90	B		P
7440-09-7	Potassium	4900.00	B		P
7782-49-2	Selenium	3.20	B	W	F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	20900.00			P
7440-28-0	Thallium	5.00	U	W	F
7440-62-2	Vanadium	27.90	B		P
7440-66-6	Zinc	9.90	B		P
	Cyanide	9.41	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.

B00F70

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

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

Matrix (soil/water): WATER Lab Sample ID: 910391304

Level (low/med): LOW Date Received: 3/13/91

% 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	9.00	B		F
7440-39-3	Barium	32.20	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	39700.00			P
7440-47-3	Chromium	6.60	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	51.40	B		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	12300.00			P
7439-96-5	Manganese	3.80	B		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5670.00			P
7782-49-2	Selenium	3.10	B	W	F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	21300.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	27.80	B		P
7440-66-6	Zinc	3.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.0726

138

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FG1

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

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

Matrix (soil/water): WATER Lab Sample ID: 910391305

Level (low/med): LOW Date Received: 3/13/91

% 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	8.20	B		F
7440-39-3	Barium	35.40	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32800.00			P
7440-47-3	Chromium	36.40			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	322.00			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	9260.00			P
7439-96-5	Manganese	26.30			P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	17.40	B		P
7440-09-7	Potassium	6290.00			P
7782-49-2	Selenium	2.70	B	W	F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	23500.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	26.10	B		P
7440-66-6	Zinc	13.40	B		P
	Cyanide	5.00	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.

B00FG2

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

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

Matrix (soil/water): WATER Lab Sample ID: 910391306

Level (low/med): LOW Date Received: 3/13/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	7.10	B		F
7440-39-3	Barium	32.00	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	32400.00			P
7440-47-3	Chromium	3.70	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	9140.00			P
7439-96-5	Manganese	21.40			P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	6410.00			P
7782-49-2	Selenium	2.40	B	W	F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	23200.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	25.10	B		P
7440-66-6	Zinc	18.80	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.0728

140

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

B00FF8

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

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

Matrix (soil/water): WATER Lab Sample ID: 910391307

Level (low/med): LOW Date Received: 3/13/91

% 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	9.60	B		F
7440-39-3	Barium	31.40	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	38800.00			P
7440-47-3	Chromium	57.90			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	335.00			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	12000.00			P
7439-96-5	Manganese	7.80	B		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	26.10	B		P
7440-09-7	Potassium	4800.00	B		P
7782-49-2	Selenium	2.60	B	W	F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	20300.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	28.40	B		P
7440-66-6	Zinc	12.40	B		P
	Cyanide	9.12	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.

B00FF9

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

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

Matrix (soil/water): WATER Lab Sample ID: 910391308

Level (low/med): LOW Date Received: 3/13/91

% 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	10.60			F
7440-39-3	Barium	29.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	37300.00			P
7440-47-3	Chromium	4.60	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	2.00	U	W	F
7439-95-4	Magnesium	11600.00			P
7439-96-5	Manganese	3.60	B		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	5490.00			P
7782-49-2	Selenium	3.00	B	W	F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	20200.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	27.50	B		P
7440-66-6	Zinc	3.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.0730

142

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FC5

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

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

Matrix (soil/water): WATER Lab Sample ID: 910394401

Level (low/med): LOW Date Received: 3/15/91

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.00	U		P
7440-36-0	Antimony	19.00	U		P
7440-38-2	Arsenic	7.40	B		F
7440-39-3	Barium	43.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	41500.00			P
7440-47-3	Chromium	31.50			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	161.00			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	13600.00			P
7439-96-5	Manganese	4.60	B		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	22.80	B		P
7440-09-7	Potassium	5790.00			P
7782-49-2	Selenium	5.40		S	F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	26900.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	29.20	B		P
7440-66-6	Zinc	14.90	B		P
	Cyanide	5.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.0731

143

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FC6

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

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

Matrix (soil/water): WATER Lab Sample ID: 910394402

Level (low/med): LOW Date Received: 3/15/91

% 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	8.90	B		F
7440-39-3	Barium	37.20	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	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	7.80		W	F
7439-95-4	Magnesium	11500.00			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	11.10	B		P
7440-09-7	Potassium	4870.00	B		P
7782-49-2	Selenium	2.80	B	W	F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	21500.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	30.50	B		P
7440-66-6	Zinc	3.00	U		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.

B00F85

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

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

Matrix (soil/water): WATER Lab Sample ID: 910394404

Level (low/med): LOW Date Received: 3/15/91

% 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	9.10	B		F
7440-39-3	Barium	28.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	28300.00			P
7440-47-3	Chromium	51.20			P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	255.00			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	8450.00			P
7439-96-5	Manganese	6.30	B		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	32.40	B		P
7440-09-7	Potassium	4950.00	B		P
7782-49-2	Selenium	1.00	U		F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	13500.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	32.00	B		P
7440-66-6	Zinc	9.20	B		P
	Cyanide	5.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.0733

145

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F86

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

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

Matrix (soil/water): WATER Lab Sample ID: 910394405

Level (low/med): LOW Date Received: 3/15/91

% 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	9.30	B		F
7440-39-3	Barium	25.40	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	26100.00			P
7440-47-3	Chromium	6.40	B		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.00	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	7770.00			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	.20	U	N	CV
7440-02-0	Nickel	8.30	B		P
7440-09-7	Potassium	4900.00	B		P
7782-49-2	Selenium	1.20	B		F
7440-22-4	Silver	4.00	U	N	P
7440-23-5	Sodium	12800.00			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	30.00	B		P
7440-66-6	Zinc	10.00	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9613500.0734

VALIDATION SUMMARY

OSM ORGANIC DATA ASSESSMENT

DATE 8/8/91

REVIEWED BY Mark A. Beckman

LABORATORY Weston

CASE # RFW# 9103L913

SDG #

SAMPLES/MATRIX (all water)

B00F79	B00F69	B00F61
B00F78		

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	X	O
4. Blanks (IV)	X	X	O
5. GC/MS Tune (V)	O	O	
6. Calibration (VI-VII; VIII pest)	O	O	X
7. Internal Standards (VIII)	O	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: VOA - no problems except methylene chloride and acetone in blank detect
PCB/Pest - data OK for all non-detects, if there had been any detected compounds quantitation could have been a problem. No detects, no qualification. Semi VOA - TIC Identification uncertain.

NOTES : all results acceptable w/attached qualifiers

Refer to the corresponding attachments for explanation of any problems.

- approved for transmittal

JJ 10/5/91

9613500.0736

ORGANIC QC - Holding Times

Name Mark A. Beck msp. Date 8/7/91

COMMENTS: VOA All holding times met for all samples.
No preservative listed, contrary to procedure and 40 CFR 136.
Pest/PCB- All holding times met, ~~[illegible]~~ JJ 10/5/91
SemiVOA - Holding time met for all samples.

ACTION: VOA - none, speedy analysis obviated need for preservatives.
Pest/PCB - none, except for note above SemiVOA - none.

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

ORGANIC QC - Surrogate Recovery

Name Mark A. Beck mgr. Date 8/7/91

COMMENTS: VOA- All surrogate recoveries were acceptable for all samples. However, all 1,2 Dichloroethane-d^4 recoveries were on the high side of the acceptable range. Pest/PCB - All surrogates recoveries were within the criteria limits for all samples, MS/MSD and method blanks. Semi VOA - a number of surrogates were out of control for BJ00F79 and SOLICLE0352, duplicates run in the form of matrix or blank spikes.

ACTION: VOA-none. Pest/PCB- none Semi VOA- none - ~~satisfactory~~ duplicates were run.

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

ORGANIC QC - MS/MSD

Name Mark A. Beck mgr. Date 8/7/91

COMMENTS: VOA % recoveries and RPD's for matrix spike/MSD are all within acceptable values. Pest/PCB - Lindane, Endrin and DDT all were out of control for MS % recoveries. Heptachlor was out of control for % RPD. All biases were high. As MS/MSD are advisory no qualifications of data will be done. Semi VOA - a few MS/MSD compounds were out of control, all biased high. 1 RPD was out of control for a low recovery (within limits) compound

ACTION: VOA - none Pest/PCB - note MS/MSD % recoveries are biased high and any results may be false positives. Semi VOA - ~~any detected compound qualified as estimated~~ none

sample #	constituent	value/qual	sample #	constituent	value/qual
- no qualification required JJ 10/5/91					

ORGANIC QC - Blanks

Name Mark G. Beck m.d.B. Date 8/7/91

COMMENTS: VOA-acetone and methylene chloride were detected in the method blank run with three samples. Pest/PCB-~~all 20 blanks~~ no compounds found in blanks. Semi VOA - Blank had 1 ppb Di-n-Butylphtalate. Appropriate blanks have been analyzed, ~~when~~, meeting analysis criteria. TIC found in blanks.

ACTION: VOA-~~any~~ qualify any acetone and methylene chloride detections estimated if < 70 ug/L. Pest/PCB-none. Semi VOA qualified all Di n-Butylphtalate < 5x (ppb) as undetected (U)

sample #	constituent	value/qual	sample #	constituent	value/qual
all VOA	methylene chloride	~~J~~ U	JJ 10/5/91		
	acetone	~~J~~ U	JJ 10/5/91		
all semi VOA	Di-n-Butylphtalate	U			
	TIC (semi VOA)				
none found in samples.	C 4.89 (5min)	U			
	5.65	U			
	"cyclohexane" 9.25	U			
	19.97 hydrocarbon	U			

9613500.0740

ORGANIC QC - GC/MS Tune

Name Mark A. Beckman Date 8/7/91

COMMENTS: GC/MS tune performed for standards and samples. Tune met specifications at all times. VOA Semi VOA - a tune was performed each time samples or blanks were run. All GC/MS tunes met specifications.

ACTION: none - VOA Semi VOA

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

ORGANIC QC - Calibrations

Name Mark A. Beckman Date 8/7/91

COMMENTS: VOA all ~~iste~~ initial and continuing calibrations met RRF and %D criteria. Pest/PCB - ~~Initial~~ Initial calibration linearity check failed %RSD requirements (SP2100 column) on 4/17-4/18 run. Only blanks were run at this time. 4/24 run went out of control after actual samples were run. Only MS/MSD on B00F6 (MS/MSD) were affected. Analytical sequence met specifications. SemiVOA - all initial and continuing calibration met acceptance criteria.

ACTION: VOA - none. Pest/PCB - Blank and matrix spikes to be qualified, see summary sheet. Pest/PCB only blanks and matrix spike, matrix spikes were affected and are qualified. See summary sheet. SemiVOA - none.

sample #	constituent	value/qual	sample #	constituent	value/qual
-no qualification required					

10/5/91

ORGANIC QC - Internal Standards

Name Mark A. Beck mdB Date 8/7/91

COMMENTS: VOA- Internal standard area and retention time criteria were met for all samples and blanks. ~~Pest~~/PCB Semi-VOA- all internal standards met area and retention time criteria for all samples and blanks.

ACTION: VOA-none Semi VOA-none

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

ORGANIC QC - Instrument Performance (pest)

Name Mark A. Beckman Date 8/8/91

COMMENTS: DDT retention time exceeded 12 min. in all cases. All standards fall in specified retention time windows. DDT and endrin breakdown never exceeded 20%. Full Mix A & B never had TOD (OBC retention time) exceed 0.3%.

ACTION: no action

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

9613500.0744

ORGANIC QC - ~~Calibrations~~ other

Name J.A. Lerch Date 10/5/91

COMMENTS: none

ACTION: none

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

1D

U U U U U 1 3

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: 04239113.20

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

% Moisture: not dec. _____ dec. Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/24/91

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

Jes 6/26/91

FORM 1 PEST 12/88 Rev.

mar. 8/8/91

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

000023

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-001

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

Lab File ID: V040909

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/09/91

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	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

8/4/91

M.A.B.

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000024

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: V040909

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

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

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

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

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	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~~ 10	~~JB~~ JU
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	2	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

FORM 1 SV-2 12/88 Rev.

5/8/91

mdh

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

00000025

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-001

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

Lab File ID: V040909

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/09/91

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

Dilution Factor: 1.00

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.43	5	J
2.	UNKNOWN	22.00	4	J
3.	HYDROCARBON	22.88	5	J
4.	HYDROCARBON	23.07	10	J
5.	UNKNOWN	~~25.15~~	~~500~~	~~JB~~
6.	UNKNOWN	25.70	6	J
7.	UNKNOWN	25.87	7	J
8.	HYDROCARBON	26.42	6	J
9.	UNKNOWN	27.35	10	J
10.	UNKNOWN	28.13	9	J
11.	UNKNOWN	30.75	5	J

8/8/91
mat.

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000048

CLIENT SAMPLE NO.

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-003

Sample wt/vol: 990 (g/mL) ML Lab File ID: V041105

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

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/11/91

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

8/6/91 mab

9613500 19750

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000049

CLIENT SAMPLE NO.

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-003

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

Lab File ID: V041105

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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	~~2~~ 10	~~JB~~ J4
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	J
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

8/8/91

FORM 1 SV-2

12/88 Rev.

MDL

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000050

CLIENT SAMPLE NO.

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-003

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

Lab File ID: V041105

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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	7.47	4	J
2.	UNKNOWN	7.98	10	J
3.	UNKNOWN	21.18	10	J
4.	UNKNOWN	21.48	6	J
5.	HYDROCARBON	22.35	8	J
6.	UNKNOWN	22.55	20	J
7.	UNKNOWN	~~24.60~~	~~800~~	~~JB~~
8.	HYDROCARBON	24.88	20	J
9.	UNKNOWN	25.15	20	J
10.	UNKNOWN	25.32	10	J
11.	UNKNOWN	25.57	10	J
12.	UNKNOWN	26.82	30	J
13.	UNKNOWN	27.57	20	J
14.	UNKNOWN	30.12	20	J
15.	UNKNOWN	33.23	10	J
16.	HYDROCARBON	37.33	10	J

8/8/91

FORM 1 SV-TIC

12/88 Rev. MQB

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000098

CLIENT SAMPLE NO.

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-007

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

Lab File ID: V041107

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	
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

8/4/91

M.U.

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000099

CLIENT SAMPLE NO.

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-007

Sample wt/vol: 990 (g/mL) ML Lab File ID: V041107

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

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/11/91

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

(1) - Cannot be separated from Diphenylamine

FORM 1 SV-2 12/88 Rev.

8/2/91

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000100

CLIENT SAMPLE NO.

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-007

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

Lab File ID: V041107

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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

Dilution Factor: 1.00

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	TRICHLORO-1-PROPENE	7.82	4	J
2.	UNKNOWN	8.00	10	J
3.	UNKNOWN	11.88	5	J
4.	UNKNOWN	21.18	9	J
5.	UNKNOWN	22.57	4	J
6.	UNKNOWN	~~24.58~~	~~300~~	~~JB~~
7.	UNKNOWN	25.15	6	J
8.	HYDROCARBON	25.32	4	J
9.	UNKNOWN	25.55	4	J
10.	HYDROCARBON	26.80	10	J
11.	UNKNOWN	27.55	10	J
12.	UNKNOWN	30.12	10	J

5/8/91

mab

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000080

CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-005

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

Lab File ID: V041106

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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

12/83 Rev. 8/9/91

mds

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET

0000081

CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-005

Sample wt/vol: 990 (g/mL) ML Lab File ID: V041106

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

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

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/11/91

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	~~2~~ 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	2	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

FORM 1 SV-2

12/88 Rev.

5/9/91

mah

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0 0 0 0 8 2

CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-005

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

Lab File ID: V041106

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/14/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/11/91

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

Dilution Factor: 1.00

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	21.18	10	J
2.	UNKNOWN	~~24.60~~	~~100~~	~~JB~~
3.	UNKNOWN	27.57	6	J
4.	UNKNOWN	30.12	7	J

FORM 1 SV-TIC

12/88 Rev.

9/9/91
mab.

1A

0000016

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-001

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

Lab File ID: AK3K13

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	U ~~B~~ J
67-64-1	Acetone	17	U ~~B~~ J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	3	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

10/5/91

0000017

1B
VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00F79

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-001

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

Lab File ID: AK3K13

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

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

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

U U U 0 0 2 4

CLIENT SAMPLE NO.

1A

VOLATILE ORGANICS ANALYSIS SHEET

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-003

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: AK3K14

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

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

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

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	U ~~UB~~
67-64-1	Acetone	21	U ~~UB~~
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

10/5/91

0000025

1B

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-003

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

Lab File ID: AK3K14

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

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

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

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-005

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

Lab File ID: AK3K15

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

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

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

10/5/91

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-005

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

Lab File ID: AK3K15

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

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

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

1A

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00FF8

Lab Name: Roy F. Weston, Inc. Work Order: G168-02-01-0000

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-007

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

Lab File ID: AK3K16

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

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

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

10/5/91

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-007

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

Lab File ID: AK3K16

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____

Date Analyzed: 03/20/91

Column: (pack/cap) CAP

Dilution Factor: 1.00

Number TICs found: 0

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

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

9613500.0766

WESTON

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 03-13-91
RFW #: 9103L913, GC/MS VOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of four (4) water samples collected on 03-11-91.

The samples were analyzed according to criteria set forth in SW 846 Method 8240 for TCL Volatile target compounds on 03-20-91.

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

1. Non-target compounds were not detected in these samples.

2. All surrogate recoveries were within EPA QC limits.

3. Matrix spike and spike duplicate samples are associated with RFW lot 9103L869.

4. The laboratory blanks contained the common contaminants methylene chloride and acetone at levels less than 2x the CRQL.

5. All internal standard area and retention time criteria were met.

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

6.21.91
Date

9613500.0767

WESTON

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 03-13-91
RFW #: 9103L913, GC/MS VOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of four (4) water samples collected on 03-11-91.

The samples were analyzed according to criteria set forth in SW 846 Method 8240 for TCL Volatile target compounds on 03-20-91.

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

1. Non-target compounds were not detected in these samples.

2. All surrogate recoveries were within EPA QC limits.

3. Matrix spike and spike duplicate samples are associated with RFW lot 9103L869.

4. The laboratory blanks contained the common contaminants methylene chloride and acetone at levels less than 2x the CRQL.

5. All internal standard area and retention time criteria were met.

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

6.21.91
Date

'7A

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 03-13-91
RFW #: 9103L913, PEST/PCB
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of four (4) water samples collected on 03-11-91.

The samples were extracted on 03-15-91 and analyzed according to criteria set forth in the Contract Laboratory Program for Pesticide and PCB target compounds on 04-18,24-91.

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

NOTE: Analysis of the samples in this data package were completed in two (2) separate run sequences.

1. Linearity and breakdown criteria were met for all compounds on the primary columns.

2. For the first analysis initiated on 04-18-91, continuing calibration criteria were exceeded for most compounds on both columns on 04-18-91 at 16:27 and 16:54 due to an increase in sensitivity. This affected the quantitation of the blank spike duplicate of sample 91LE0356-MB1 by increasing recoveries.

   Retention time criteria were met for all compounds on the primary column. Retention time criteria were met on the confirmation column for all compounds which required a confirmation analysis.

3. For the second analysis initiated on 04-18-91, continuing calibration criteria were exceeded for all compounds on the primary column on 04-24-91 at 13:07 due to an increase in instrument sensitivity. This affected the quantitation of the matrix spike and matrix spike duplicate of sample B00F69 by increasing recoveries. Similar results were obtained on the confirmation column and were reported.

   Retention time criteria were met for all compounds on both the primary and confirmation columns.

4. During the associated sample analyses, detection of target compounds was not impaired. There was no impact on the data since target compounds were not present in the sample extracts.

5. All surrogate recoveries were within EPA QC limits.

6. Five (5) of twelve (12) blank spike recoveries were outside EPA QC limits. The following blank spike recoveries exceeded the EPA QC limits:

Compound	Recovery (%)	Limit (%)
Gamma-BHC	135, 135	123
Endrin	154, 146	121
4,4'-DDT	130	127

7. Eight (8) of eleven (11) obtainable matrix spike recoveries were outside EPA QC limits. The following matrix spike recoveries exceeded the EPA QC limits:

Compound	Recovery (%)	Limit (%)
Gamma-BHC	140, 140	123
Aldrin	125	120
Dieldrin	146, 146	126
Endrin	172, 166	121
4,4'-DDT	156	127

8. The blank spike samples required two-fold dilutions to obtain spike recoveries within the linear range of the instrument.

7-10-91.

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

Date

1D

0 0 0 0 0 3 0

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00FF8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9103L913-007

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

Lab File ID: 04239113.23

Level: (low/med) LOW

Date Received: 03/13/91

% Moisture: not dec. _____ dec.

Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 04/24/91

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

JKB 6/26/91

FORM 1 PEST 12/88 Rev.

MAP 8/8/91

1D

PESTICIDE ORGANICS ANALYSIS SHEET

0 0 0 0 0 2 3 CLIENT SAMPLE NO.

B00FG1

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-005

Sample wt/vol: 990 (g/mL) ML Lab File ID: 04239113.22

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

% Moisture: not dec. _____ dec. Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/24/91

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

Dek 6/26/91

FORM 1 PEST 12/88 Rev.

mar 8/20/91

1D

0000020 CLIENT SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS SHEET

B00F69

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9103L913-003

Sample wt/vol: 980 (g/mL) ML Lab File ID: 04239113.21

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

% Moisture: not dec. _____ dec. Date Extracted: 03/15/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 04/24/91

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

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.051	U
319-85-7	Beta-BHC	0.051	U
319-86-8	Delta-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)	0.051	U
76-44-8	Heptachlor	0.051	U
309-00-2	Aldrin	0.051	U
1024-57-3	Heptachlor epoxide	0.051	U
959-98-8	Endosulfan I	0.051	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.51	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.51	U
5103-74-2	gamma-Chlordane	0.51	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.51	U
11104-28-2	Aroclor-1221	0.51	U
11141-16-5	Aroclor-1232	0.51	U
53469-21-9	Aroclor-1242	0.51	U
12672-29-6	Aroclor-1248	0.51	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

JEB 6/26/91

FORM 1 PEST 12/88 Rev.

MAH 9/5/91

9613500.0773

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 11/10/91

REVIEWED BY JA Jerch

LABORATORY Weston

CASE # —

SDG # —

RFW# 91031913

SAMPLES/MATRIX B00F79

B00F69

B00FG1

B00FF8

all water

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Alkalinity	Anions IC[1]	Hardness
1. Holding Time		O	~~O~~ X 11/10/91	O
2. Blanks		O	X	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: no major problems - all results acceptable w/qualification

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

9615500.0774

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (pg 2)

DATE 11/10/91

SAMPLES/MATRIX See Cover

REVIEWED BY JA Lerchf

LABORATORY Weston

CASE # —

SDG # —

ZFW# 91032913

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.

9615500.0775

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (pg 3)

DATE 11/10/91

SAMPLES/MATRIX See cover

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # –

SDG # –

RFW# 91031913

DATA ASSESSMENT SUMMARY

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

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

OVERALL ASSESSSMENT: See cover

NOTES: See Cover

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

RCRA LEVEL C QC

Name JA Lerch Date 11/10/91

QC Check: Holding Time

COMMENTS: Nitrate, Nitrite, phosphate - 48 hr HT exceeded
Hold times not specified for Hardness, TDS
- all other Holding time criteria met

ACTION: qualify associated results as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	Nitrite	UJ			
	Nitrate	UJ, J			
	phosphate	UJ			

RCRA LEVEL C QC

Name JA Lerch Date 11/10/91

QC Check: Blanks

COMMENTS: choride detected in blank 91LIC13-MB1; all other method blanks free of contamination

ACTION: qualify associated results as per QSM guidelines

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

RCRA LEVEL C QC

Name JA Lerch Date 11/10/91

QC Check: Spike Recovery

COMMENTS: B00FFB - hardness MS recovery within limits
B00F79 - NO_2/NO_3 MS %R ok ; B00FG1 - Sulfate MS %R high
- all other blank spike recoveries ok for all analytes (TDS N/A)

ACTION: qualify associated results as per OSM guidelines

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

RCRA LEVEL C QC

Name JA Lerch Date 11/10/91

QC Check: Duplicates

COMMENTS: B00F79 - NO_2/NO_3, TDS replicate %D ok
B00F69 - conductance replicate %D ok; B00F78 - hardness %D ok
B00F61 - Sulfate replicate %D ok; Anions, Ammonia, TOC, sulfate - all blank spike duplicate %Differences acceptable

ACTION: none

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

9613500.0780

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	B00F79	Alkalinity	24.0	MG/L	2.0
		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 uJ	mg/L	0.25
		Nitrate by IC	0.25 uJ	mg/L	0.25
		~~Cyanide, Total~~	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	0.25 uJ	mg/L	0.25
		Hardness	1.0 u	MG/L	1.0
		Nitrate Nitrite	0.10	MG/L	0.10
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	4.4	PH UNITS	0.10
		Sulfate	5.0 u	MG/L	5.0
		Specific Conductance	593	UMHOS/CM	1.0
		Total Dissolved Solids	5.0 u	MG/L	5.0
-003	B00F69	Alkalinity	144	MG/L	2.0
		Chloride by IC	7.7	mg/L	0.25
		Fluoride by IC	0.51	mg/L	0.50
		Nitrite by IC	0.25 uJ	mg/L	0.25
		Nitrate by IC	38.3 J	mg/L	2.5
		~~Cyanide, Total~~	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	40.4 J	mg/L	2.5
		Hardness	136	MG/L	2.0
		Nitrate Nitrite	10.6	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.54	MG/L	0.50
		pH	7.4	PH UNITS	0.10
		Sulfate	41.8	MG/L	10.0
		Specific Conductance	351	UMHOS/CM	1.0
		Total Dissolved Solids	269	MG/L	5.0

11/10/91

9613500.0781

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-005	B00FG1	Alkalinity	142	MG/L	2.0
		Chloride by IC	6.2	mg/L	0.25
		Fluoride by IC	1.1	mg/L	0.50
		Nitrite by IC	0.25 uJ	mg/L	0.25
		Nitrate by IC	20.3 J	mg/L	2.5
		~~Cyanide, Total~~	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	43.2 J	mg/L	2.5
		Hardness	110	MG/L	2.0
		Nitrate Nitrite	5.5	MG/L	1.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	2.7	MG/L	0.50
		pH	7.5	PH UNITS	0.10
		Sulfate	44.1	MG/L	10.0
		Specific Conductance	319	UMHOS/CM	1.0
		Total Dissolved Solids	239	MG/L	5.0
-007	B00FF8	Alkalinity	144	MG/L	2.0
		Chloride by IC	7.7	mg/L	0.25
		Fluoride by IC	0.54	mg/L	0.50
		Nitrite by IC	0.25 uJ	mg/L	0.25
		Nitrate by IC	38.6 J	mg/L	2.5
		~~Cyanide, Total~~	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	41.0 J	mg/L	2.5
		Hardness	140	MG/L	2.0
		Nitrate Nitrite	10.6	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	3.2	MG/L	0.50
		pH	7.6	PH UNITS	0.10
		Sulfate	53.6	MG/L	10.0
		Specific Conductance	353	UMHOS/CM	1.0
		Total Dissolved Solids	261	MG/L	5.0

JJ 11/10/91

9613500.0782

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 4/10/91

REVIEWED BY JA Lerch

LABORATORY Weston

~~CASE #~~ REW# 9103L913 (also 9103L944)

SDG # N/A

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

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS ICP(Bi, Sr, Sn)		
1. Holding time	O		
2. Blanks	O		
3. Spike Recovery	O		
4. Duplicate	O		
5. LCS	O		
6.			
7.			
8.			
9.			
10.			

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

OVERALL ASSESSSMENT: all results acceptable

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

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

54 7900 046

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: Holding time

COMMENTS: - 6 mo Holding time met for all samples

ACTION: none

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

9615500L0784

RCRA LEVEL C QC

Name JA Lerch JL Date 11/9/91

QC Check: Blanks

COMMENTS: - all method blanks free of contamination.

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: Spike Recovery

COMMENTS: 300FF9 - Bi, Sr, Sn MS %R within control limits; Bi MSD %R also ok

- all LCS spike + Spike dup %R ok for Sn, Sr

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: Duplicate

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

ACTION: none

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

9613500.0787

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: LCS

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

ACTION: none

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

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	B00F79	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	150	u	UG/L	150
		Calcium, Total	5000	u	UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	10.0	u	UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	100	u	UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	5000	u	UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	5000	u	UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	3.0	u	UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	5.0	u	UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	100	u	UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	B00F80	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.0	u	UG/L	10.0
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	150	u	UG/L	150
		Calcium, Soluble	5000	u	UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	5000	u	UG/L	5000
		Magnesium, Soluble	5000	u	UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	5000	u	UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.0
		Lead, Soluble	3.0	u	UG/L	3.0
		Antimony, Soluble	60.0	u	UG/L	60.0
		Selenium, Soluble	5.0	u	UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	100	u	UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-003	B00F69	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	150	u	UG/L	150
		Calcium, Total	38200		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	29.3		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	214		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	11900		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	20900		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	3.0	u	UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	5.0	u	UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	186		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	B00F70	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.0	u	UG/L	10.0
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	150	u	UG/L	150
		Calcium, Soluble	39700		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	5670		UG/L	5000
		Magnesium, Soluble	12300		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	21300		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.0
		Lead, Soluble	3.0	u	UG/L	3.0
		Antimony, Soluble	60.0	u	UG/L	60.0
		Selenium, Soluble	5.0	u	UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	192		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	B00FG1	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	150	u	UG/L	150
		Calcium, Total	32800		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	36.4		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	322		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	6290		UG/L	5000
		Magnesium, Total	9260		UG/L	5000
		Manganese, Total	26.3		UG/L	15.0
		Sodium, Total	23500		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	3.0	u	UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	5.0	u	UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	165		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-006	B00FG2	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.0	u	UG/L	10.0
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	150	u	UG/L	150
		Calcium, Soluble	32400		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	6410		UG/L	5000
		Magnesium, Soluble	9140		UG/L	5000
		Manganese, Soluble	21.4		UG/L	15.0
		Sodium, Soluble	23200		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.0
		Lead, Soluble	3.0	u	UG/L	3.0
		Antimony, Soluble	60.0	u	UG/L	60.0
		Selenium, Soluble	5.0	u	UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	162		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-007	B00FF8	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	150	u	UG/L	150
		Calcium, Total	38800		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	57.9		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	335		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	12000		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	20300		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	3.0	u	UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	5.0	u	UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	187		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

LIENT: WESTINGHOUSE HANFORD
ORK ORDER: 6168-02-01-0000

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-008	B00FF9	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.6		UG/L	10.0
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	150	u	UG/L	150
		Calcium, Soluble	37300		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	5490		UG/L	5000
		Magnesium, Soluble	11600		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	20200		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.0
		Lead, Soluble	3.0	u	UG/L	3.0
		Antimony, Soluble	60.0	u	UG/L	60.0
		Selenium, Soluble	5.0	u	UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	180		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	B00FC5	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	150	u	UG/L	150
		Calcium, Total	41500		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	31.5		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	161		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5790		UG/L	5000
		Magnesium, Total	13600		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	26900		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	3.0	u	UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	5.4		UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	205		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	B00FC6	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.0	u	UG/L	10.0
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	150	u	UG/L	150
		Calcium, Soluble	37500		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	5000	u	UG/L	5000
		Magnesium, Soluble	11500		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	21500		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.0
		Lead, Soluble	7.8		UG/L	3.0
		Antimony, Soluble	60.0	u	UG/L	60.0
		Selenium, Soluble	5.0	u	UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	183		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	B00F85	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	150	u	UG/L	150
		Calcium, Total	28300		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	51.2		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	255		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	8450		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	13500		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	3.0	u	UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	5.0	u	UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	138		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/28/91

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

WESTON BATCH #: 9103L944

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	B00F86	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.0	u	UG/L	10.0
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	150	u	UG/L	150
		Calcium, Soluble	26100		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	5000	u	UG/L	5000
		Magnesium, Soluble	7770		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	12800		UG/L	5000
		Nickel, Soluble	40.0	u	UG/L	40.0
		Lead, Soluble	3.0	u	UG/L	3.0
		Antimony, Soluble	60.0	u	UG/L	60.0
		Selenium, Soluble	5.0	u	UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	126		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

9613500.0800

OSM INORGANIC DATA ASSESSMENT

DATE 8/7/91

REVIEWED BY MARK A. BECKMAN

LABORATORY Weston

CASE # RFW# 9103L913, 9103L944

SDG # _____

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

DATA ASSESSMENT SUMMARY

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

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

OVERALL ASSESSSMENT: all mercury data unusable; other data qualified as marked on Form I sheets.

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

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

Raw data, original validation with RFW 9103L913

ok to transmit - JJ 10/5/91

9613500.0801

INORGANIC QC - Calibrations

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

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

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

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

9613506.0802

INORGANIC QC - Blanks

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

COMMENTS: All blanks free of contaminants except magnesium (103.3) 5x = 516, sodium (164.5) 5x = 824, vanadium (13.3) 5x = 66.5 and zinc (3.6) 5x = 15 and selenium (1.2) 5x = 6

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

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

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

INORGANIC QC - ICS

Name Mark A. Beckman Date 8/6/91

COMMENTS: ICS were run at beginning, ~~of~~ and end of ~~sam~~ analysis. Results were observed for element not as present in standard. Negative results were observed for antimony (Sb), potassium (K), ~~sodium~~ Na. Positive results were observed for manganese (Mn). All other for which contr limits a with co

ACTION: Sodium-negative, level < IDL, potassium values < CRDL qualified as J (if > IDL) UJ if < IDL. Manganese results qualified estimated if > IDL and < 600 ug/L

sample #	constituent	value/qual	sample #	constituent	value/qual
all ~~B00F69~~	Sb antimony	~~UJ~~ acceptable 10/5/91	B00F69 B00F70 B00F71 B00F72 B00FF8 B00FF9 B00F85	Mn manganese	J
B00F69 B00FF8 B00FC6 B00F85 B00F86	K potassium	~~J~~ ~~UJ~~ acceptable 10/5/91			
B00F79 B00F80	K potassium	UJ			

INORGANIC QC - Matrix Spike

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

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

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

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

9613500L0805

INORGANIC QC - Duplicate Analysis

Name Mark A. Beck Date 8/6/91

COMMENTS: All duplicate analyses met acceptance criteria

ACTION: none - none needed

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

INORGANIC QC - LCS

Name Mark A. Beckman Date 8/6/91

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

ACTION: none - none needed

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

9613500.0807

INORGANIC QC - Serial Dilution

Name Mark A. Beckman Date 8/6/91

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

ACTION: none - none needed

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

9613500.0808

INORGANIC QC - Holding Times

Name Mark C. Beckman Date 8/7/91

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

ACTION: none - none needed

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

9613500.0809

INORGANIC QC - ~~other~~ GFAA

Name JA Lerch Date 10/5/91

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

ACTION: qualify associated results per QSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
B00F79	Tl	UJ			
B00F69	Se				
	Tl				
B00F70	Se				
B00FG1	Se				
B00FG2	Se				
B00FF8	Se	J			
B00FF9	Pb	UJ			
	Se				
B00FC6	Pb				
	Se				

9613500.0810

INORGANIC QC - other

Name Mark A. Beckman Date 8/7/91

COMMENTS: none

ACTION: none

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

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F79

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

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

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

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

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	~~U~~	UJ	P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	92.0	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	1010	~~U~~	UJ	P
7782-49-2	Selenium	1.50	~~B~~	U	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	277	~~B~~	U	P
7440-28-0	Thallium	5.00	~~U~~	W UJ	F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	17.5	~~B~~	U	P
	Cyanide	5.00	U		C

JJP 8/5/91

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

MAB 8/7/91

Comments:

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F80

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

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

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

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

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	5.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	92.0	U		P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	84.0	U		P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	~~U~~ ~~N~~ R		CV
7440-02-0	Nickel	7.00	U		P
7440-09-7	Potassium	1010	~~U~~	UJ	P
7782-49-2	Selenium	1.50	~~B~~	U	F
7440-22-4	Silver	4.00	~~U~~ ~~N~~ UJ		P
7440-23-5	Sodium	71.0	U		P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	10.9	~~B~~	U	P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mab. 8/7/91

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F69

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

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

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

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

% Solids:

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

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

JT 10/5/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mab. 8/7/91

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F70

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MAB 8/7/91

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FG1

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mah 4/7/91

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FG2

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

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

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

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

% Solids:

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

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

8/6/91

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mab 8/7/91

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FF8

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MAS 8/7/91

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FF9

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mah 4/7/91

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FC5

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mah 8/7/91

FORM I - IN

461500.0620

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00FC6

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

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

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

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

% Solids:

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	77.0	U		P
7440-36-0	Antimony	19.0	U		P
7440-38-2	Arsenic	8.90	B		F
7440-39-3	Barium	37.2	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	4.00	U		P
7440-70-2	Calcium	37500			P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	4.00	U		P
7440-50-8	Copper	7.00	U		P
7439-89-6	Iron	37.0	U		P
7439-92-1	Lead	7.80	J	W	F
7439-95-4	Magnesium	11500			P
7439-96-5	Manganese	2.00	U		P
7439-97-6	Mercury	0.200	~~U~~	~~N~~ R	CV
7440-02-0	Nickel	11.1	B		P
7440-09-7	Potassium	4870	~~B~~	J	P
7782-49-2	Selenium	2.80	~~B~~	~~W~~ UJ	F
7440-22-4	Silver	4.00	~~U~~	~~N~~ UJ	P
7440-23-5	Sodium	21500			P
7440-28-0	Thallium	5.00	U		F
7440-62-2	Vanadium	30.5	~~B~~	U	P
7440-66-6	Zinc	3.00	U		P
	Cyanide				

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

mah 6/7/91

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F85

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MAK 4/7/91

FORM I - IN

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B00F86

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

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

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

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

% Solids:

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

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

Color Before:COLORLESS Clarity Before:CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

MCB. 8/7/91

FORM I - IN

9615500.0823

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 11/10/91

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

RFW# 9103L913

SAMPLES/MATRIX B00F79

B00F69

B00FG1

B00FF8

all water

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Alkalinity	Anions IC[1]	Hardness
1. Holding Time		O	~~O~~ X 11/10/91	O
2. Blanks		O	X	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: no major problems - all results acceptable w/qualification

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

9615590.0824

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (pg 2)

DATE 11/10/91

SAMPLES/MATRIX See Cover

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

ZFW# 91032913

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.

9145801.0825

Westinghouse
Hanford Company

OSM RCRA LEVEL C DATA ASSESSMENT (pg 3)

DATE 11/10/91 SAMPLES/MATRIX See cover

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # –

SDG # –

RFW# 9103L913

DATA ASSESSMENT SUMMARY

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

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

OVERALL ASSESSSMENT: See cover

NOTES: See Cover

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

9615500.0826

RCRA LEVEL C QC

Name JA Lerch Date 11/10/91

QC Check: Holding Time

COMMENTS: Nitrate, Nitrite, phosphate - 48 hr HT exceeded
Hold times not specified for Hardness, TDS
- all other Holding time criteria met

ACTION: qualify associated results as per OSM guidelines

sample #	constituent	value/qual	sample #	constituent	value/qual
all	Nitrite	UJ			
	Nitrate	UJ, J			
	phosphate	UJ			

RCRA LEVEL C QC

Name JA Lerch Date 11/10/91

QC Check: Blanks

COMMENTS: choride detected in blank 91LIC13-MB1; all other method blanks free of contamination

ACTION: qualify associated results as per QSM guidelines

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

9615593.0928

RCRA LEVEL C QC

Name JA Lerch Date 11/10/91

QC Check: Spike Recovery

COMMENTS: B00FF8 - hardness MS recovery within limits
B00F79 - NO_2/NO_3 MS %R ok ; B00FG1 - Sulfate MS %R high
- all other blank spike recoveries ok for all
analytes (TDS N/A)

ACTION: qualify associated results as per
OSM guidelines

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

9615500.0829

RCRA LEVEL C QC

Name JA Lerch Date 11/10/91

QC Check: Duplicates

COMMENTS: B00F79 - NO_2/NO_3, TDS replicate %D ok
B00F69 - conductance replicate %D ok; B00F78 - hardness %D ok
B00FG1 - Sulfate replicate %D ok; Anions, Ammonia, TOC, Sulfate - all blank spike duplicate %Differences acceptable

ACTION: none

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

9613900.0850

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	B00F79	Alkalinity	24.0	MG/L	2.0
		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 uJ	mg/L	0.25
		Nitrate by IC	0.25 uJ	mg/L	0.25
		~~Cyanide, Total~~	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	0.25 uJ	mg/L	0.25
		Hardness	1.0 u	MG/L	1.0
		Nitrate Nitrite	0.10	MG/L	0.10
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	4.4	PH UNITS	0.10
		Sulfate	5.0 u	MG/L	5.0
		Specific Conductance	593	UMHOS/CM	1.0
		Total Dissolved Solids	5.0 u	MG/L	5.0
-003	B00F69	Alkalinity	144	MG/L	2.0
		Chloride by IC	7.7	mg/L	0.25
		Fluoride by IC	0.51	mg/L	0.50
		Nitrite by IC	0.25 uJ	mg/L	0.25
		Nitrate by IC	38.3 J	mg/L	2.5
		~~Cyanide, Total~~	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	40.4 J	mg/L	2.5
		Hardness	136	MG/L	2.0
		Nitrate Nitrite	10.6	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.54	MG/L	0.50
		pH	7.4	PH UNITS	0.10
		Sulfate	41.8	MG/L	10.0
		Specific Conductance	351	UMHOS/CM	1.0
		Total Dissolved Solids	269	MG/L	5.0

11/10/91

9613500.0851

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 04/12/91

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

WESTON BATCH #: 9103L913

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-005	B00FG1	Alkalinity	142	MG/L	2.0
		Chloride by IC	6.2	mg/L	0.25
		Fluoride by IC	1.1	mg/L	0.50
		Nitrite by IC	0.25 uJ	mg/L	0.25
		Nitrate by IC	20.3 J	mg/L	2.5
		~~Cyanide, Total~~	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	43.2 J	mg/L	2.5
		Hardness	110	MG/L	2.0
		Nitrate Nitrite	5.5	MG/L	1.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	2.7	MG/L	0.50
		pH	7.5	PH UNITS	0.10
		Sulfate	44.1	MG/L	10.0
		Specific Conductance	319	UMHOS/CM	1.0
		Total Dissolved Solids	239	MG/L	5.0
-007	B00FF8	Alkalinity	144	MG/L	2.0
		Chloride by IC	7.7	mg/L	0.25
		Fluoride by IC	0.54	mg/L	0.50
		Nitrite by IC	0.25 uJ	mg/L	0.25
		Nitrate by IC	38.6 J	mg/L	2.5
		~~Cyanide, Total~~	10.0 u	UG/L	10.0
		Phosphate by IC	0.25 uJ	mg/L	0.25
		Sulfate by IC	41.0 J	mg/L	2.5
		Hardness	140	MG/L	2.0
		Nitrate Nitrite	10.6	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	3.2	MG/L	0.50
		pH	7.6	PH UNITS	0.10
		Sulfate	53.6	MG/L	10.0
		Specific Conductance	353	UMHOS/CM	1.0
		Total Dissolved Solids	261	MG/L	5.0

JJ 11/10/91