WESTON Analytics Use Only
1102L566

Custody Transfer Record/Lab Work Request

5 WESTON

Page 1 of 1

Client: Westinghouse Hanford
Est. Final Proj. Sampling Date: 4/28-02-01
Work Order #: ~~0620-41-01-0000~~
Project Contact/Phone #:
AD Project Manager: Peg Beaty/Josie King
QC: CLP Del: CLP TAT: 35 day
Date Rec'd: 2/15/91 Date Due: 3/22/91
Account #: WS-Hanford

Refrigerator #
#/Type Container
Volume
Preservatives
ANALYSES REQUESTED

Liquid	3/G	3/G	→		3/P	1/P	1/G	1/G	1/P	1/P	1/P	1/P	1/P											
Solid																								
Liquid	40ml	5/HR	→		4HR	4HR	5D	5D	4HR	4HR	4HR	4HR	4HR											
Solid																								
Preservatives	HCL	HCL			HNO3	HCL	None	HCL	HNO3	HNO3	None	None	None											
	ORGANIC									INORG														
ANALYSES REQUESTED	GC	BNA	Pest/PCB	Herb	RAD (Gross)	TOT URANIUM	TRITIUM	TOC	Metal	CN	Anions	Inorg (1)	Inorg (2)											

MATRIX CODES:	Lab ID	Client ID/Description	Matrix QC Chosen (✓)	Matrix	Date Collected	GC	BNA	Pest/PCB	Herb	RAD (Gross)	TOT URANIUM	TRITIUM	TOC	Metal	CN	Anions	Inorg (1)	Inorg (2)						
S - Soil	001	B00 DK9		W	2/12/91	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓						
SE - Sediment	2	DL0																						
SO - Solid	3	DY5				✓																		
SL - Sludge	4	DL6			2/12/91	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓						
W - Water	5	DL7																						
O - Oil	6	DL9				✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓						
A - Air	7	DM0																						
D - Drum Solids	8	DL5				✓																		
DL - Drum Liquids	9	DK6			2/12/91	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓						
TCLP - TCLP Leachate	10	DK7																						
W - Wipe																								
O - Other																								
F - Fish																								

Special Instructions:

DATE REVISIONS

WESTON Analytics Use Only

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

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

Discrepancies Between Samples Labeled and COC Record? Y or N

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time

DEC 1996 RECEIVED EDMC

START

0046087

9102L566-W2S-002

9213512.0385

VOLATILE ORGANICS ANALYSIS SHEET 000020

CLIENT SAMPLE NO.

B00-DK9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-001

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

Lab File ID: W022009

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

9213512.0386

VOLATILE ORGANICS ANALYSIS SHEET 000021
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOO-DK9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-001

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

Lab File ID: W022009

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

9213512.0387

VOLATILE ORGANICS ANALYSIS SHEET 0000029

CLIENT SAMPLE NO.

BOO-DY5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-003

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

Lab File ID: W022010

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	27	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	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

9163512.0388

0000030

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOO-DY5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-003

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

Lab File ID: W022010

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

9213512.0389

1A

VOLATILE ORGANICS ANALYSIS SHEET 000033

CLIENT SAMPLE NO.

BOO-DL6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-004

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

Lab File ID: W022011

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	75	B
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

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOO-DL6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-004

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

Lab File ID: W022011

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

9143512.0391

VOLATILE ORGANICS ANALYSIS SHEET 0000047

CLIENT SAMPLE NO.

BOO-DL9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-006

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

Lab File ID: W022113

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/21/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	29	B
67-64-1	Acetone	5	JB
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

9213512.0392

VOLATILE ORGANICS ANALYSIS SHEET 0 0 0 0 4 8
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOO-DL9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-006

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

Lab File ID: W022113

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/21/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

9213512.0393 0000056

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOO-DL5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-008

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: W022114

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ Date Analyzed: 02/21/91

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

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	B
67-64-1	Acetone	5	JB
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOO-DL5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-008

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

Lab File ID: W022114

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/21/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

9713512.0395

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000067

CLIENT SAMPLE NO.

BOO-DK6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-009

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

Lab File ID: W022014

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

9213512.0396

VOLATILE ORGANICS ANALYSIS SHEET 0000068
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOO-DK6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-009

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

Lab File ID: W022014

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

9713512.0397

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0 0 0 0 2 1

CLIENT SAMPLE NO.

BOO-DK9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031303

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/13/91

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	3	J
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

9213512.0398

1C

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0100022

CLIENT SAMPLE NO.

BOO-DK9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031303

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/13/91

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	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

9313512.0399

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0H00023

CLIENT SAMPLE NO.

BOO-DK9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-001

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

Lab File ID: S031303

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 03/13/91

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

Dilution Factor: 1.00

Number TICs found: 0

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

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

9713512.0400

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000034

CLIENT SAMPLE NO.

BOO-DL6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031210

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/12/91

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

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

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

9713512.0401

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0000035

CLIENT SAMPLE NO.

BOO-DL6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031210

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/12/91

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	J
206-44-0	Fluoranthene	0.8	J
129-00-0	Pyrene	3	J
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9713512.0402

1F

SEMIVOLATILE ORGANICS ANALYSIS SHEET 0000036
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOO-DL6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-004

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031210

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/12/91

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

Number TICs found: 0

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

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

9713512.0403

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0000049

CLIENT SAMPLE NO.

BOO-DL9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-006

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

Lab File ID: S031211

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____ dec.

Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 03/12/91

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

9215512.0404

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0 0 0 0 5 0

CLIENT SAMPLE NO.

BOO-DL9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-006

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031211

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/12/91

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

(1) - Cannot be separated from Diphenylamine

9713512.0405

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

0000051

CLIENT SAMPLE NO.

BOO-DL9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-006

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031211

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/12/91

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

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	2-CHLORO-ETHANOL PHOSPHATE	17.12	30	J

9713512.0406

1B

SEMIVOLATILE ORGANICS ANALYSIS SHEET 000066

CLIENT SAMPLE NO.

BOO-DK6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-009

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031212

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/12/91

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

9213512.0407

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 000067

CLIENT SAMPLE NO.

BOO-DK6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-009

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031212

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/12/91

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	1	J
129-00-0	Pyrene	4	J
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-Octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9713512.0408

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 000063

TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOO-DK6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-009

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S031212

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/19/91

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 03/12/91

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

Number TICs found: 0

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

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

9713512.0409

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B00-DK9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-001

Sample wt/vol: 500 (g/mL) ML Lab File ID: 03269113.47

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/20/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/27/91

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

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	0.10	U
319-85-7	Beta-BHC	0.10	U
319-86-8	Delta-BHC	0.10	U
58-89-9	gamma-BHC (Lindane)	0.10	U
76-44-8	Heptachlor	0.10	U
309-00-2	Aldrin	0.10	U
1024-57-3	Heptachlor epoxide	0.10	U
959-98-8	Endosulfan I	0.10	U
60-57-1	Dieldrin	0.20	U
72-55-9	4,4'-DDE	0.20	U
72-20-8	Endrin	0.20	U
33213-65-9	Endosulfan II	0.20	U
72-54-8	4,4'-DDD	0.20	U
1031-07-8	Endosulfan sulfate	0.20	U
50-29-3	4,4'-DDT	0.20	U
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

0000014

9713512.0410

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOO-DL5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-004

Sample wt/vol: 990 (g/mL) ML Lab File ID: 03269113.50

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/20/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/27/91

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

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

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

M 4/16/91

000019

FORM 1 PEST 12/88 Rev.

9713512.0411

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOO-DL9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-006

Sample wt/vol: 990 (g/mL) ML Lab File ID: 03269113.51

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/20/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/27/91

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

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

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

4/16/91

0000024

FORM 1 PEST 12/88 Rev.

9713512.0412

1D

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOO-DK6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-009

Sample wt/vol: 990 (g/mL) ML Lab File ID: 03269113.52

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ dec. Date Extracted: 02/20/91

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 03/27/91

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

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

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

4/16/91

000029

FORM 1 PEST 12/88 Rev.

9713512.0413

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 03/29/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOO-DK9	Alkalinity	118	MG/L	2.0
		Chloride by IC	9.3	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	0.81	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	18.8	mg/L	0.25
		Hardness	108	MG/L	2.0
		Nitrate Nitrite	456	MG/L	25.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.74	MG/L	0.50
		pH	6.3	PH UNITS	0.10
		Sulfate	16.2	MG/L	5.0
		Specific Conductance	309	UMHOS/CM	1.0
		Total Dissolved Solids	249	MG/L	5.0
-004	BOO-DL6	Alkalinity	102	MG/L	2.0
		Chloride by IC	11.4	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	2.9	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	26.1	mg/L	0.25
		Hardness	122	MG/L	2.0
		Nitrate Nitrite	5.0 u	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.64	MG/L	0.50
		pH	6.6	PH UNITS	0.10
		Sulfate	51.8	MG/L	10.0
		Specific Conductance	327	UMHOS/CM	1.0
		Total Dissolved Solids	255	MG/L	5.0
-006	BOO-DL9	Alkalinity	104	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	11.7	UG/L	10.0

9713512.0414

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 03/29/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-006	BOO-DL9	Phosphate by IC	0.25 u	mg/L	0.25
		Sulfate by IC	1.8	mg/L	0.25
		Hardness	172	MG/L	2.0
		Nitrate Nitrite	5.6	MG/L	0.50
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.7	PH UNITS	0.10
		Sulfate	89.6	MG/L	20.0
		Specific Conductance	455	UMHOS/CM	1.0
		Total Dissolved Solids	341	MG/L	5.0
-009	BOO-DK6	Alkalinity	106	MG/L	2.0
		Chloride by IC	25.6	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	81.3	mg/L	0.25
		Cyanide, Total	122	UG/L	16.7
		Phosphate by IC	0.25 u	mg/L	0.25
		Sulfate by IC	65.7	mg/L	0.25
		Hardness	266	MG/L	2.0
		Nitrate Nitrite	26.1	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.7	PH UNITS	0.10
		Sulfate	149	MG/L	50.0
		Specific Conductance	666	UMHOS/CM	1.0
		Total Dissolved Solids	497	MG/L	5.0

9713512.0415

Golder Associates	SUBJECT Data Package 9102L566-WES-002		
	Job No.	Made by SGM	Date 07/18/94
	Ref.	Checked	Sheet 1 of 1
		Reviewed	

Data Package 9102L566-WES-002

Semivolatile Fraction

Pages 1 through 8 are missing from this section.

Susan Gropp Manchester
7/18/94

Westinghouse Hanford Company 9213512.0416

OSM ORGANIC DATA ASSESSMENT

DATE 6/01/91

REVIEWED BY JA Lerch

LABORATORY WESTON

CASE # —

SDG # —

RFW Lot # 9102L566

SAMPLES/MATRIX B00DK9 B00DK6

B00DY5

B00DL6

B00DL9

B00DL5

– all water

DATA ASSESSMENT SUMMARY

	VOA	ABN	PEST
1. Holding Times (Form I)	O		
2. Surrogate Recovery (II)	O		
3. Matrix Spike/ MSD (III)	O		
4. Blanks (IV)	X		
5. GC/MS Tune (V)	O		
6. Calibration (VI-VII; VIII pest)	O		
7. Internal Standards (VIII)	O		
8. Instr. Perform. (IX pest)			
9. Other ( ) none			

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

OVERALL ASSESSMENT: no major problems – all results acceptable w/attached qualifiers

NOTES : none

Refer to the corresponding attachments for explanation of any problems.

54 7900 046

9713512.0417

ORGANIC QC - Holding Times

Name JA Lerch Date 6/01/91

COMMENTS: all VOA holding time criteria met

ACTION: none

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

9713512.0418

ORGANIC QC - Surrogate Recovery

Name JA Lerch Date 6/01/91

COMMENTS: all surrogate recoveries within control limits for samples and blanks

ACTION: none

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

9713512.0419

ORGANIC QC - MS/MSD

Name JA Lerch Date 6/01/91

COMMENTS: BOODK6MS+MSD - all MS + MSD recoveries within control limits, all RPD's ok

ACTION: none

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

9713512.0420

ORGANIC QC - Blanks

Name JA Lerch JL Date 6/01/91

COMMENTS: method blank summary ok
- $MeCl_2$, acetone, and 4-methyl-2-pentanone detetected in VOA blanks; no TIC's or unknowns detected

ACTION: qualify associated results as per OSM guidelines

sample #	constituent	value/qual
B00DK9	$MeCl_2$	12 U
	acetone	10 U
B00DY5	$MeCl_2$	27 U
	acetone	17 U
B00DL6	$MeCl_2$	75 U
	acetone	21 U
B00DL9	$MeCl_2$	29 U
	acetone	10 U
B00DL5	$MeCl_2$	118 U
	acetone	10 U
	~~4-methyl-2-pentanone~~	
	6/01/91	
B00DK6	$MeCl_2$	71 U
	acetone	17 U

sample #	constituent	value/qual

9713512.0421

ORGANIC QC - GC/MS Tune

Name JA Lerch Date 6/01/91

COMMENTS: all GC/MS tune and mass calibration criteria met

ACTION: none

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

9713512.0422

ORGANIC QC - Calibrations

Name JA Lerch Date 6/01/91

COMMENTS: all VOA initial and continuing calibration criteria met for SPCC + CCC compounds

ACTION: none

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

9713512.0423

ORGANIC QC - Internal Standards

Name JA Lerch Date 6/01/91

COMMENTS: -all internal std area counts and retention time shifts within control limits

ACTION: none

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

9713512.0424

ORGANIC QC - Instrument Performance (pest)

Name JA Lerch Date 6/01/91

COMMENTS: N/A

ACTION: —

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

9713512.0425

ORGANIC QC - Other

Name JA Lerch Date 6/01/91

COMMENTS: none

ACTION: —

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

1A

VOLATILE ORGANICS ANALYSIS SHEET

0000020

CLIENT SAMPLE NO.

B00-DK9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-001

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

Lab File ID: W022009

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	12	~~B~~ U
67-64-1	Acetone	~~2~~ 10	~~5B~~ 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

6/21/91

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000021

CLIENT SAMPLE NO.

B00-DK9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-001

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

Lab File ID: W022009

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

1A

VOLATILE ORGANICS ANALYSIS SHEET 000029

CLIENT SAMPLE NO.

BOO-DY5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9102L566-003

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: W022010

Level: (low/med) LOW Date Received: 02/15/91

% Moisture: not dec. _____ Date Analyzed: 02/20/91

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

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

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

6/01/91

1E

VOLATILE ORGANICS ANALYSIS SHEET 000030
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

BOO-DY5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-003

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

Lab File ID: W022010

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000038

CLIENT SAMPLE NO.

B00-DL6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-004

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

Lab File ID: W022011

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

6/01/91

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00-DL6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-004

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

Lab File ID: W022011

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000047

CLIENT SAMPLE NO.

BOO-DL9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-006

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

Lab File ID: W022113

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/21/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	29	~~B~~ U
67-64-1	Acetone	~~5~~ 10	~~B~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	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

JZ 6/01/91

1E

VOLATILE ORGANICS ANALYSIS SHEET 0 0 0 0 4 8
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00-DL9

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-006

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

Lab File ID: W022113

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/21/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

1A

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BOO-DL5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-008

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

Lab File ID: W022114

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/21/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	11	~~B~~ U
67-64-1	Acetone	~~5~~ 10	~~JB~~ U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

JJ 6/01/91

1E

0000057

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B00-DL5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-008

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

Lab File ID: W022114

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/21/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

1A

VOLATILE ORGANICS ANALYSIS SHEET 0000067

CLIENT SAMPLE NO.

B00-DK6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-009

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

Lab File ID: W022014

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

JF 6/01/91

1E

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0000068

CLIENT SAMPLE NO.

B00-DK6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9102L566-009

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

Lab File ID: W022014

Level: (low/med) LOW

Date Received: 02/15/91

% Moisture: not dec. _____

Date Analyzed: 02/20/91

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

Westinghouse Hanford Company

9213512.0458

OSM ORGANIC DATA ASSESSMENT

DATE 5/31/91

REVIEWED BY JA Lerch

LABORATORY WESTON

CASE # —

SDG # —

RFW Lot # 9102L566

SAMPLES/MATRIX B00DK9

B00DL6

B00DL9

B00DK6

all water

DATA ASSESSMENT SUMMARY

	VOA	ABN	PEST
1. Holding Times (Form I)		O	
2. Surrogate Recovery (II)		X	
3. Matrix Spike/ MSD (III)		X	
4. Blanks (IV)		O	
5. GC/MS Tune (V)		O	
6. Calibration (VI-VII; VIII pest)		O	
7. Internal Standards (VIII)		O	
8. Instr. Perform. (IX pest)			
9. Other ( )		none	

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

OVERALL ASSESSMENT: no major problems - all results acceptable

NOTES : none

Refer to the corresponding attachments for explanation of any problems.

9713512.0459

ORGANIC QC - ~~Surrogate Recovery~~ Holding Time

Name JA Lerch Date 5/31/91

COMMENTS: all semiVOA holding time reqs met

ACTION: none

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

9713512.0440

ORGANIC QC - ~~Holding Times~~ Surrogate %R

Name JA Lerch Date 5/31/91

COMMENTS: Surrogate S3(TPH) high for sample B00DK6; all other surrogate recoveries within control limits

ACTION: no qualification made based on surrogate recovery for SemiVOA if no more than 1 out of control and >10%

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

9713512.0441

ORGANIC QC - MS/MSD

Name JA Lerch Date 5/31/91

COMMENTS: MS/MSD analysis performed on blank (laboratory

SBLKLE0194-MB1 - pentachlorophenol spike %R low, RPD out of control; all other spike + spike dup. %R within limits, RPD's ok

ACTION: advisory limits - no indication of matrix effects or major problems based on other QC analysis

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

9715512.0442

ORGANIC QC - Blanks

Name JA Lerch Date 5/31/91

COMMENTS: method blank summary ok
SBLK- no TCL compounds or TIC's detected
in SemiVOA blank

ACTION: none

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

9713512.0443

ORGANIC QC - GC/MS Tune

Name JA Lerch Date 5/31/91

COMMENTS: all GC/MS tune and mass calibration criteria met

ACTION: none

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

9713512.0444

ORGANIC QC - Calibrations

Name JA Lerch Date 5/31/91

COMMENTS: all initial + continuing calibration criteria met for SPCC + CCC compounds

ACTION: none

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

9716512.0445

ORGANIC QC - Internal Standards

Name JA Lerch Date 5/31/91

COMMENTS: all internal std area counts and retention time shifts within control limits

ACTION: none

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

9713512_0446

ORGANIC QC - Instrument Performance (pest)

Name JA Lerch Date 5/31/91

COMMENTS: N/A

ACTION: —

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

9713512.0447

ORGANIC QC - Other

Name JA Lerch Date 5/31/91

COMMENTS: none

ACTION: —

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

9113512.0446

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

DATE RECEIVED: 02/15/91 RFW LOT # :9102L566

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOO-DK9	001	W	91LE0194	02/12/91	02/19/91	03/13/91
BOO-DL6	004	W	91LE0194	02/13/91	02/19/91	03/12/91
BOO-DL9	006	W	91LE0194	02/13/91	02/19/91	03/12/91
BOO-DK6	009	W	91LE0194	02/12/91	02/19/91	03/12/91
LAB QC:						
SBLK	MB1	W	91LE0194	N/A	02/19/91	02/20/91
SBLK	MB1 BS	W	91LE0194	N/A	02/19/91	02/20/91
SBLK	MB1 BSD	W	91LE0194	N/A	02/19/91	02/20/91

INTRO: 9713512.0449 PAGE

Chain Of Custody..... 1
Data Summary..... 3

I. Case Narrative..... 8

II. QC Summary..... 11
A. Surrogate % Recovery Summary (Form 2)
B. Matrix Spike (Form 3)
C. Reagent Blank Summary (Form 4)
D. GC/MS Tuning and Calibration Standard (Form 5)

III. Sample Data Package..... 20
A. Sample Data in order of RFW sample number
1. Tabulated Results (Form 1)
2. Tentatively identified compound (form 1E)
3. Raw Data in order:
a. Reconstructed Ion Chromatogram(s)
b. Quantitation Report(s)
c. HSL Mass Spectra
d. TIC Mass Spectra
e. GC/MS Library Search for TIC

IV. Standards Data Package..... 81
A. Initial Calibration Data:
1. Form 6
2. Reconstructed Ion Chromatogram(s) and Quantitation Report(s)

B. Continuing Calibration Data
1. Form 7
2. Reconstructed Ion Chromatogram(s) and Quantitation Report(s)

C. Internal Standard Summary (Form 8)

V. Raw QC Data Package..... 189
A. GC/MS Tuning and Calibration Standard: DFTPP
1. Bar Graph
2. Mass Listing

B. Blank Data
1. Tabulated Results (Form 1)
2. TIC Results (Form 1B)
3. Raw Data
a. Reconstructed Ion Chromatogram(s) and Quantitation Report(s)
b. HSL Spectra
c. TIC Spectra
d. GC/MS Library Search for TIC

C. Matrix Spike Data
1. Tabulated Results (Form 1)
2. Raw Data
a. Reconstructed Ion Chromatogram(s)
b. Quantitation Report(s)

VI. Addition Documentation..... 231
A. Extraction Record

9713512.0450

CHAIN OF CUSTODY

WESTON Analytics Use Only

1102L566

Custody Transfer Record/Lab Work Request

5

Page 1 of 1

Client: Westinghouse Hanford
Est. Final Proj. Sampling Date: 12/2-12/5/91
Work Order: 0600-411-81-0006
Project Contact/Phone: Greg Beale/Chris King
AD Project Manager: Greg Beale
QC Level: LLP
Date Rec'd: 12/5/91 Date Due: 12/22/91
Account #: WS-Hanford

Refrigerator #

Type Container	Liquid	Solid	Liquid	Solid	Preservative	ORGANIC				INORG					
Volume	3/G	2/G	3/G	1/P	1/G	1/G	1/P	1/P	1/P	1/P	1/P				
	1pm	2HR	1HR	1HR	250	250	1HR	1HR	1HR	1HR	1HR				
	UNP	NONE		UNP	NONE	NONE	HCL	NONE	NONE	HNO3	UNP	NONE	NONE	NONE	
ANALYSES REQUESTED	GCMS	GCMS	Test PCB	Pest	RAD WET	TOT URANIUM	TOTAL	TC	Metal	CN	Anions	Inorg (1)	Inorg (2)		

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

Lab ID	Client ID/Description	Matrix QC Chosen (✓)	Matrix	Date Collected	GCMS	GCMS	Test PCB	Pest	RAD WET	TOT URANIUM	TOTAL	TC	Metal	CN	Anions	Inorg (1)	Inorg (2)
001	B00 DK9		W	12/12/91	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
2	DL0												✓				
3	DY5				✓												
4	DL6			12/12/91	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
5	DL7												✓				
6	DL9				✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
7	DM0												✓				
8	DL5				✓												
9	DK6			12/12/91	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
10	DK7												✓				

Special Instructions:
[illegible] Chris King
Analyte = HSL, BT, SR, SN
Analyte = [illegible]
Analyte = Oil, [illegible], TDS
Analyte = HARD, NH3, NO3, NO2

DATE REVISIONS:

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
[illegible]	K. Shepard	12/5/91	[illegible]				

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

WESTON Analytics Use Only

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

COC Tape was: 1) Present on Outer Package Y or N; 2) Unbroken on Outer Package Y or N; 3) Present on Sample Y or N; 4) Unbroken on Sample Y or N; COC Record Present Upon Sample Rec'd Y or N

WESTON 001A 8/90

9713512.0452

DATA SUMMARY

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

RFW Batch Number: 9102L566 | Client: WESTINGHOUSE HANFORD | Work Order: 6168-02-01-0000 | Report Date: 05/14/91 18:03 | Page: 1a

	Cust ID:	BOO-DK9		BOO-DL6		BOO-DL9		BOO-DK6		SBLK		SBLK BS	
Sample Information	RFW#:	001		004		006		009		91LE0194-MB1		91LE0194-MB1	
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	D.F.:	1.00		1.00		1.00		1.00		1.00		1.00	
	Units:	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Surrogate Recovery	Nitrobenzene-d5	64	%	52	%	53	%	52	%	70	%	66	%
	2-Fluorobiphenyl	77	%	54	%	58	%	53	%	79	%	72	%
	p-Terphenyl-d14	124	%	125	%	135	%	143 *	%	95	%	79	%
	Phenol-d5	27	%	17	%	22	%	22	%	28	%	34	%
	2-Fluorophenol	48	%	34	%	46	%	45	%	45	%	51	%
	2,4,6-Tribromophenol	50	%	44	%	56	%	51	%	54	%	70	%
	Phenol	10	U	10	U	10	U	10	U	10	U	33	%
	bis(2-Chloroethyl)ether	10	U	10	U	10	U	10	U	10	U	10	U
	2-Chlorophenol	10	U	10	U	10	U	10	U	10	U	67	%
	1,3-Dichlorobenzene	3	J	10	U	10	U	10	U	10	U	10	U
	1,4-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	50	%
	Benzyl alcohol	10	U	10	U	10	U	10	U	10	U	10	U
	1,2-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U
	2-Methylphenol	10	U	10	U	10	U	10	U	10	U	10	U
	bis(2-Chloroisopropyl)ether	10	U	10	U	10	U	10	U	10	U	10	U
	4-Methylphenol	10	U	10	U	10	U	10	U	10	U	10	U
	N-Nitroso-Di-n-propylamine	10	U	10	U	10	U	10	U	10	U	56	%
	Hexachloroethane	10	U	10	U	10	U	10	U	10	U	10	U
	Nitrobenzene	10	U	10	U	10	U	10	U	10	U	10	U
	Isophorone	10	U	10	U	10	U	10	U	10	U	10	U
	2-Nitrophenol	10	U	10	U	10	U	10	U	10	U	10	U
	2,4-Dimethylphenol	10	U	10	U	10	U	10	U	10	U	10	U
	Benzoic acid	50	U	50	U	50	U	50	U	50	U	50	U
	bis(2-Chloroethoxy)methane	10	U	10	U	10	U	10	U	10	U	10	U
	2,4-Dichlorophenol	10	U	10	U	10	U	10	U	10	U	10	U
	1,2,4-Trichlorobenzene	10	U	10	U	10	U	10	U	10	U	55	%
	Naphthalene	10	U	10	U	10	U	10	U	10	U	10	U
	4-Chloroaniline	10	U	10	U	10	U	10	U	10	U	10	U
	Hexachlorobutadiene	10	U	10	U	10	U	10	U	10	U	10	U
	4-Chloro-3-methylphenol	10	U	10	U	10	U	10	U	10	U	67	%
	2-Methylnaphthalene	10	U	10	U	10	U	10	U	10	U	10	U
	Hexachlorocyclopentadiene	10	U	10	U	10	U	10	U	10	U	10	U

*= Outside of EPA CLP QC limits.

9713512.0453

RFW Batch Number: 9102L566 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000

Cust ID:	BOO-DK9		BOO-DL6		BOO-DL9		BOO-DK6		SBLK		SBLK BS	
RFW#:	001		004		006		009		91LE0194-MB1		91LE0194-MB1	
2,4,6-Trichlorophenol	10	U	10	U	10	U	10	U	10	U	10	U
2,4,5-Trichlorophenol	50	U	50	U	50	U	50	U	50	U	50	U
2-Chloronaphthalene	10	U	10	U	10	U	10	U	10	U	10	U
2-Nitroaniline	50	U	50	U	50	U	50	U	50	U	50	U
Dimethylphthalate	10	U	10	U	10	U	10	U	10	U	10	U
Acenaphthylene	10	U	10	U	10	U	10	U	10	U	10	U
2,6-Dinitrotoluene	10	U	10	U	10	U	10	U	10	U	10	U
3-Nitroaniline	50	U	50	U	50	U	50	U	50	U	50	U
Acenaphthene	10	U	10	U	10	U	10	U	10	U	66	%
2,4-Dinitrophenol	50	U	50	U	50	U	50	U	50	U	50	U
4-Nitrophenol	50	U	50	U	50	U	50	U	50	U	31	%
Dibenzofuran	10	U	10	U	10	U	10	U	10	U	10	U
2,4-Dinitrotoluene	10	U	10	U	10	U	10	U	10	U	67	%
Diethylphthalate	10	U	10	U	10	U	10	U	10	U	10	U
4-Chlorophenyl-phenylether	10	U	10	U	10	U	10	U	10	U	10	U
Fluorene	10	U	10	U	10	U	10	U	10	U	10	U
4-Nitroaniline	50	U	50	U	50	U	50	U	50	U	50	U
4,6-Dinitro-2-methylphenol	50	U	50	U	50	U	50	U	50	U	50	U
N-Nitrosodiphenylamine (1)	10	U	10	U	10	U	10	U	10	U	10	U
4-Bromophenyl-phenylether	10	U	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U
Pentachlorophenol	50	U	50	U	50	U	50	U	50	U	8 *	%
Phenanthrene	10	U	10	U	10	U	10	U	10	U	10	U
Anthracene	10	U	10	U	10	U	10	U	10	U	10	U
Di-n-Butylphthalate	1	J	2	J	2	J	1	J	10	U	10	U
Fluoranthene	10	U	0.8	J	1	J	1	J	10	U	10	U
Pyrene	10	U	3	J	4	J	4	J	10	U	67	%
Butylbenzylphthalate	10	U	10	U	10	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	20	U	20	U	20	U	20	U	20	U	20	U
Benzo(a)anthracene	10	U	10	U	10	U	10	U	10	U	10	U
Chrysene	10	U	10	U	10	U	10	U	10	U	10	U
bis(2-Ethylhexyl)phthalate	10	U	10	U	10	U	10	U	10	U	10	U
Di-n-Octyl phthalate	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(b)fluoranthene	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(k)fluoranthene	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(a)pyrene	10	U	10	U	10	U	10	U	10	U	10	U
Indeno(1,2,3-cd)pyrene	10	U	10	U	10	U	10	U	10	U	10	U
Dibenzo(a,h)anthracene	10	U	10	U	10	U	10	U	10	U	10	U
Benzo(g,h,i)perylene	10	U	10	U	10	U	10	U	10	U	10	U

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

9725212.0151

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

RFW Batch Number: 9102L566 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 05/14/91 18:03 Page: 2a

Cust ID: SBLK BSD

Sample Information

RFW#: 91LE0194-MB1
Matrix: WATER
D.F.: 1.00
Units: ug/L

Surrogate Recovery	Nitrobenzene-d5	83	%
	2-Fluorobiphenyl	88	%
	p-Terphenyl-d14	95	%
	Phenol-d5	35	%
	2-Fluorophenol	55	%
	2,4,6-Tribromophenol	73	%

Phenol	36	%
bis(2-Chloroethyl)ether	10	U
2-Chlorophenol	73	%
1,3-Dichlorobenzene	10	U
1,4-Dichlorobenzene	66	%
Benzyl alcohol	10	U
1,2-Dichlorobenzene	10	U
2-Methylphenol	10	U
bis(2-Chloroisopropyl)ether	10	U
4-Methylphenol	10	U
N-Nitroso-Di-n-propylamine	71	%
Hexachloroethane	10	U
Nitrobenzene	10	U
Isophorone	10	U
2-Nitrophenol	10	U
2,4-Dimethylphenol	10	U
Benzoic acid	50	U
bis(2-Chloroethoxy)methane	10	U
2,4-Dichlorophenol	10	U
1,2,4-Trichlorobenzene	70	%
Naphthalene	10	U
4-Chloroaniline	10	U
Hexachlorobutadiene	10	U
4-Chloro-3-methylphenol	71	%
2-Methylnaphthalene	10	U
Hexachlorocyclopentadiene	10	U

*= Outside of EPA CLP QC limits.

Cust ID: SBLK BSD

RFW#: 91LE0194-MB1

2,4,6-Trichlorophenol	10	U
2,4,5-Trichlorophenol	50	U
2-Chloronaphthalene	10	U
2-Nitroaniline	50	U
Dimethylphthalate	10	U
Acenaphthylene	10	U
2,6-Dinitrotoluene	10	U
3-Nitroaniline	50	U
Acenaphthene	79	%
2,4-Dinitrophenol	50	U
4-Nitrophenol	35	%
Dibenzofuran	10	U
2,4-Dinitrotoluene	84	%
Diethylphthalate	10	U
4-Chlorophenyl-phenylether	10	U
Fluorene	10	U
4-Nitroaniline	50	U
4,6-Dinitro-2-methylphenol	50	U
N-Nitrosodiphenylamine (1)	10	U
4-Bromophenyl-phenylether	10	U
Hexachlorobenzene	10	U
Pentachlorophenol	67	%
Phenanthrene	10	U
Anthracene	10	U
Di-n-Butylphthalate	10	U
Fluoranthene	10	U
Pyrene	83	%
Butylbenzylphthalate	10	U
3,3'-Dichlorobenzidine	20	U
Benzo(a)anthracene	10	U
Chrysene	10	U
bis(2-Ethylhexyl)phthalate	10	U
Di-n-Octyl phthalate	10	U
Benzo(b)fluoranthene	10	U
Benzo(k)fluoranthene	10	U
Benzo(a)pyrene	10	U
Indeno(1,2,3-cd)pyrene	10	U
Dibenzo(a,h)anthracene	10	U
Benzo(g,h,i)perylene	10	U

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

9713512.0457 0000008

CASE NARRATIVE

Westinghouse Hanford Company

9713512.0459

OSM ORGANIC DATA ASSESSMENT

DATE 6/01/91

REVIEWED BY JA Lerch

LABORATORY WESTON

CASE # —

SDG # —

RFW Lot # 9102L566

SAMPLES/MATRIX B00DK9

B00DL6

B00DL9

B00DK6

-all water

DATA ASSESSMENT SUMMARY

	VOA	ABN	PEST
1. Holding Times (Form I)			O
2. Surrogate Recovery (II)			O
3. Matrix Spike/ MSD (III)			X
4. Blanks (IV)			O
5. GC/MS Tune (V)			
6. Calibration (VI-VII; VIII pest)			O
7. Internal Standards (VIII)			
8. Instr. Perform. (IX pest)			O
9. Other ( )			none

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

OVERALL ASSESSMENT: no major problems — all results acceptable

NOTES : none

Refer to the corresponding attachments for explanation of any problems.

9713512.0459

ORGANIC QC - Holding Times

Name JA Lerch Date 6/01/91

COMMENTS: all Pest Holding time criteria met

ACTION: none

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

9713512.0460

ORGANIC QC - Surrogate Recovery

Name JA Lerch Date 6/01/91

COMMENTS: all Pest surrogate recoveries within control limits for samples and blanks

ACTION: none

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

ORGANIC QC - MS/MSD

Name JA Lerch Date 6/01/91

COMMENTS: BOODK9 — several MS + MSD recoveries high; all RPD's ok — Results may be biased high
PBLK — spike + spike dup — all recoveries and RPD's within control limits

ACTION: no TCL compounds detected in sample — no qualification of results based on MS/MSD data

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

9713512.0462

ORGANIC QC - Blanks

Name JA Lerch Date 6/01/91

COMMENTS: PBLK free of any contamination

ACTION: none

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

9713512.0463

ORGANIC QC - GC/MS Tune

Name JA Lerch Date 6/01/91

COMMENTS: N/A

ACTION: —

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

9713512.0464

ORGANIC QC - Calibrations

Name JA Lerch Date 6/01/91

COMMENTS: - initial calibration linearity check ok for primary column
- analytical sequence requirements met
- continuing cal. factor %D criteria met for primary column through all sample analysis

ACTION: none

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

9713512.0465

ORGANIC QC - Internal Standards

Name JA Lerch Date 6/01/91

COMMENTS: N/A

ACTION: —

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

ORGANIC QC - Instrument Performance (pest)

Name JA Lerch Date 6/01/91

COMMENTS: - DDT/Endrin % breakdown criteria met
- DBC Retention time shift criteria met
- all DDT retention times > 12 min
- all Retention time window criteria met

ACTION: none

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

9713512.0467

ORGANIC QC - Other

Name JA Lerch Date 6/01/91

COMMENTS: none

ACTION: —

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

9713512.0468

Roy F. Weston, Inc. - Lionville Laboratory
PEST/PCB ANALYTICAL DATA PACKAGE FOR
WESTINGHOUSE HANFORD

DATE RECEIVED: 02/15/91 RFW LOT # :9102L566

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOO-DK9	001	W	91LE0210	02/12/91	02/20/91	03/27/91
BOO-DK9	001 MS	W	91LE0210	02/12/91	02/20/91	03/27/91
BOO-DK9	001 MSD	W	91LE0210	02/12/91	02/20/91	03/27/91
BOO-DL6	004	W	91LE0210	02/13/91	02/20/91	03/27/91
BOO-DL9	006	W	91LE0210	02/13/91	02/20/91	03/27/91
BOO-DK6	009	W	91LE0210	02/12/91	02/20/91	03/27/91

LAB QC:

PBLK	MB1	W	91LE0210	N/A	02/20/91	03/27/91
PBLK	MB1 BS	W	91LE0210	N/A	02/20/91	03/27/91
PBLK	MB1 BSD	W	91LE0210	N/A	02/20/91	03/27/91

9213512.0469

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

DATE RECEIVED: 02/15/91 RFW LOT # :9102L566

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B00-DK9	001	W	91LVW018	02/12/91	N/A	02/20/91
B00-DY5	003	W	91LVW018	02/12/91	N/A	02/20/91
B00-DL6	004	W	91LVW018	02/13/91	N/A	02/20/91
B00-DL9	006	W	91LVW019	02/13/91	N/A	02/21/91
B00-DL5	008	W	91LVW019	02/13/91	N/A	02/21/91
B00-DK6	009	W	91LVW018	02/12/91	N/A	02/20/91
B00-DK6	009 MS	W	91LVW018	02/12/91	N/A	02/20/91
B00-DK6	009 MSD	W	91LVW018	02/12/91	N/A	02/20/91

LAB QC:

VBLK	MB1	W	91LVW018	N/A	N/A	02/20/91
VBLK	MB1	W	91LVW019	N/A	N/A	02/21/91

9713512.0470

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

DATE RECEIVED: 02/15/91 RFW LOT # :9102L566

CLIENT ID	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
B00-DK9	001	W	91LE0194	02/12/91	02/19/91	03/13/91
B00-DL6	004	W	91LE0194	02/13/91	02/19/91	03/12/91
B00-DL9	006	W	91LE0194	02/13/91	02/19/91	03/12/91
B00-DK6	009	W	91LE0194	02/12/91	02/19/91	03/12/91
LAB QC:						
SBLK	MB1	W	91LE0194	N/A	02/19/91	02/20/91
SBLK	MB1 BS	W	91LE0194	N/A	02/19/91	02/20/91
SBLK	MB1 BSD	W	91LE0194	N/A	02/19/91	02/20/91

9713512.0471

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

DATE RECEIVED: 02/15/91 RFW LOT # :9102L566

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
BOO-DK9						
ALKALINITY	001	W	91LAL003	02/12/91	02/28/91	02/28/91
CHLORIDE BY IC	001	W	91LIC06	02/12/91	02/21/91	02/22/91
FLUORIDE BY IC	001	W	91LIC06	02/12/91	02/21/91	02/21/91
NITRITE BY IC	001	W	91LIC06	02/12/91	02/21/91	02/22/91
NITRATE BY IC	001	W	91LIC06	02/12/91	02/21/91	02/22/91
TOTAL CYANIDE	001	W	91LC059	02/12/91	02/26/91	02/26/91
PHOSPHATE BY IC	001	W	91LIC06	02/12/91	02/21/91	02/22/91
SULFATE BY IC	001	W	91LIC06	02/12/91	02/21/91	02/22/91
HARDNESS	001	W	91LHD004	02/12/91	03/11/91	03/11/91
NITRATE NITRITE	001	W	91LNO079	02/12/91	02/19/91	02/19/91
AMMONIA	001	W	91LAM019	02/12/91	02/26/91	02/26/91
TOTAL ORGANIC CARBON	001	W	91LTC047	02/12/91	03/11/91	03/11/91
TOTAL ORGANIC CARBON	001 REP	W	91LTC047	02/12/91	03/11/91	03/11/91
TOTAL ORGANIC CARBON	001 MS	W	91LTC047	02/12/91	03/11/91	03/11/91
TOTAL ORGANIC CARBON	001 MSD	W	91LTC047	02/12/91	03/11/91	03/11/91
PH	001	W	91LPH023	02/12/91	02/20/91	02/20/91
SULFATE	001	W	91LS4012	02/12/91	02/21/91	02/21/91
SPECIFIC CONDUCTANCE	001	W	91LSP012	02/12/91	02/26/91	02/26/91
SUB-OUT TEST FOR SUB	001	W		02/12/91		
TOTAL DISSOLVED SOLI	001	W	91LSS012	02/12/91	02/20/91	02/21/91
TOTAL DISSOLVED SOLI	001 REP	W	91LSS012	02/12/91	02/20/91	02/21/91
BOO-DL6						
ALKALINITY	004	W	91LAL003	02/13/91	02/28/91	02/28/91
CHLORIDE BY IC	004	W	91LIC06	02/13/91	02/21/91	02/22/91
FLUORIDE BY IC	004	W	91LIC06	02/13/91	02/21/91	02/21/91
NITRITE BY IC	004	W	91LIC06	02/13/91	02/21/91	02/22/91
NITRATE BY IC	004	W	91LIC06	02/13/91	02/21/91	02/22/91
TOTAL CYANIDE	004	W	91LC059	02/13/91	02/26/91	02/26/91
PHOSPHATE BY IC	004	W	91LIC06	02/13/91	02/21/91	02/22/91
SULFATE BY IC	004	W	91LIC06	02/13/91	02/21/91	02/22/91
HARDNESS	004	W	91LHD004	02/13/91	03/11/91	03/11/91
NITRATE NITRITE	004	W	91LNO079	02/13/91	02/19/91	02/19/91
NITRATE NITRITE	004 REP	W	91LNO079	02/13/91	02/19/91	02/19/91
NITRATE NITRITE	004 MS	W	91LNO079	02/13/91	02/19/91	02/19/91
NITRATE NITRITE	004 MSD	W	91LNO079	02/13/91	02/19/91	02/19/91

9713512.0472

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

DATE RECEIVED: 02/15/91 RFW LOT # :9102L566

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
AMMONIA	004	W	91LAM019	02/13/91	02/26/91	02/26/91
TOTAL ORGANIC CARBON	004	W	91LTC047	02/13/91	03/11/91	03/11/91
PH	004	W	91LPH023	02/13/91	02/20/91	02/20/91
SULFATE	004	W	91LS4012	02/13/91	02/21/91	02/21/91
SULFATE	004 REP	W	91LS4012	02/13/91	02/21/91	02/21/91
SULFATE	004 MS	W	91LS4012	02/13/91	02/21/91	02/21/91
SPECIFIC CONDUCTANCE	004	W	91LSP012	02/13/91	02/26/91	02/26/91
SUB-OUT TEST FOR SUB	004	W		02/13/91		
TOTAL DISSOLVED SOLI	004	W	91LSS012	02/13/91	02/20/91	02/21/91
BOO-DL9						
ALKALINITY	006	W	91LAL003	02/13/91	02/28/91	02/28/91
CHLORIDE BY IC	006	W	91LIC06	02/13/91	02/21/91	02/21/91
FLUORIDE BY IC	006	W	91LIC06	02/13/91	02/21/91	02/21/91
NITRITE BY IC	006	W	91LIC06	02/13/91	02/21/91	02/21/91
NITRATE BY IC	006	W	91LIC06	02/13/91	02/21/91	02/21/91
TOTAL CYANIDE	006	W	91LC059	02/13/91	02/26/91	02/26/91
PHOSPHATE BY IC	006	W	91LIC06	02/13/91	02/21/91	02/21/91
SULFATE BY IC	006	W	91LIC06	02/13/91	02/21/91	02/21/91
HARDNESS	006	W	91LHD004	02/13/91	03/11/91	03/11/91
NITRATE NITRITE	006	W	91LNO079	02/13/91	02/19/91	02/19/91
AMMONIA	006	W	91LAM019	02/13/91	02/26/91	02/26/91
TOTAL ORGANIC CARBON	006	W	91LTC047	02/13/91	03/11/91	03/11/91
PH	006	W	91LPH023	02/13/91	02/20/91	02/20/91
SULFATE	006	W	91LS4012	02/13/91	02/21/91	02/21/91
SPECIFIC CONDUCTANCE	006	W	91LSP012	02/13/91	02/26/91	02/26/91
SUB-OUT TEST FOR SUB	006	W		02/13/91		
TOTAL DISSOLVED SOLI	006	W	91LSS012	02/13/91	02/20/91	02/21/91
BOO-DK6						
ALKALINITY	009	W	91LAL003	02/12/91	02/28/91	02/28/91
CHLORIDE BY IC	009	W	91LIC06	02/12/91	02/21/91	02/22/91
FLUORIDE BY IC	009	W	91LIC06	02/12/91	02/21/91	02/21/91
NITRITE BY IC	009	W	91LIC06	02/12/91	02/21/91	02/22/91
NITRATE BY IC	009	W	91LIC06	02/12/91	02/21/91	02/22/91
TOTAL CYANIDE	009	W	91LC059	02/12/91	02/26/91	02/26/91
TOTAL CYANIDE	009 REP	W	91LC059	02/12/91	02/26/91	02/26/91
TOTAL CYANIDE	009 MS	W	91LC059	02/12/91	02/26/91	02/26/91

9713512.0473

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

DATE RECEIVED: 02/15/91 RFW LOT # :9102L566

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
PHOSPHATE BY IC	009	W	91LIC06	02/12/91	02/21/91	02/22/91
SULFATE BY IC	009	W	91LIC06	02/12/91	02/21/91	02/22/91
HARDNESS	009	W	91LHD004	02/12/91	03/11/91	03/11/91
NITRATE NITRITE	009	W	91LNO079	02/12/91	02/19/91	02/19/91
AMMONIA	009	W	91LAM019	02/12/91	02/26/91	02/26/91
AMMONIA	009 REP	W	91LAM019	02/12/91	02/26/91	02/26/91
AMMONIA	009 MS	W	91LAM019	02/12/91	02/26/91	02/26/91
TOTAL ORGANIC CARBON	009	W	91LTC047	02/12/91	03/11/91	03/11/91
PH	009	W	91LPH023	02/12/91	02/20/91	02/20/91
SULFATE	009	W	91LS4012	02/12/91	02/21/91	02/21/91
SPECIFIC CONDUCTANCE	009	W	91LSP012	02/12/91	02/26/91	02/26/91
SUB-OUT TEST FOR SUB	009	W		02/12/91		
TOTAL DISSOLVED SOLI	009	W	91LSS012	02/12/91	02/20/91	02/21/91

LAB QC:

ALKALINITY	MB1	W	91LAL003	N/A	02/28/91	02/28/91
ALKALINITY	MB1 BS	W	91LAL003	N/A	02/28/91	02/28/91
ALKALINITY	MB2	W	91LAL003	N/A	02/28/91	02/28/91
ALKALINITY	MB2 BS	W	91LAL003	N/A	02/28/91	02/28/91
ALKALINITY	MB3	W	91LAL003	N/A	02/28/91	02/28/91
ALKALINITY	MB3 BS	W	91LAL003	N/A	02/28/91	02/28/91
ALKALINITY	MB4	W	91LAL003	N/A	02/28/91	02/28/91
ALKALINITY	MB4 BS	W	91LAL003	N/A	02/28/91	02/28/91
CHLORIDE BY IC	MB1	W	91LIC06	N/A	02/21/91	02/21/91
CHLORIDE BY IC	MB1 BS	W	91LIC06	N/A	02/21/91	02/21/91
FLUORIDE BY IC	MB1	W	91LIC06	N/A	02/21/91	02/21/91
FLUORIDE BY IC	MB1 BS	W	91LIC06	N/A	02/21/91	02/21/91
NITRITE BY IC	MB1	W	91LIC06	N/A	02/21/91	02/21/91
NITRITE BY IC	MB1 BS	W	91LIC06	N/A	02/21/91	02/21/91
NITRATE BY IC	MB1	W	91LIC06	N/A	02/21/91	02/21/91
NITRATE BY IC	MB1 BS	W	91LIC06	N/A	02/21/91	02/21/91
PHOSPHATE BY IC	MB1	W	91LIC06	N/A	02/21/91	02/21/91
PHOSPHATE BY IC	MB1 BS	W	91LIC06	N/A	02/21/91	02/21/91
SULFATE BY IC	MB1	W	91LIC06	N/A	02/21/91	02/21/91
SULFATE BY IC	MB1 BS	W	91LIC06	N/A	02/21/91	02/21/91
CHLORIDE BY IC	MB2	W	91LIC06	N/A	02/21/91	02/22/91
CHLORIDE BY IC	MB2 BS	W	91LIC06	N/A	02/21/91	02/22/91
NITRITE BY IC	MB2	W	91LIC06	N/A	02/21/91	02/22/91
NITRITE BY IC	MB2 BS	W	91LIC06	N/A	02/21/91	02/22/91

9713512.0474

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

DATE RECEIVED: 02/15/91 RFW LOT # :9102L566

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
NITRATE BY IC	MB2	W	91LIC06	N/A	02/21/91	02/22/91
NITRATE BY IC	MB2 BS	W	91LIC06	N/A	02/21/91	02/22/91
PHOSPHATE BY IC	MB2	W	91LIC06	N/A	02/21/91	02/22/91
PHOSPHATE BY IC	MB2 BS	W	91LIC06	N/A	02/21/91	02/22/91
SULFATE BY IC	MB2	W	91LIC06	N/A	02/21/91	02/22/91
SULFATE BY IC	MB2 BS	W	91LIC06	N/A	02/21/91	02/22/91
TOTAL CYANIDE	LC1 L	W	91LC059	N/A	02/26/91	02/26/91
TOTAL CYANIDE	LC2 L	W	91LC059	N/A	02/26/91	02/26/91
TOTAL CYANIDE	MB1	W	91LC059	N/A	02/26/91	02/26/91
HARDNESS	MB1	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB1 BS	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB2	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB2 BS	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB2 BSD	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB3	W	91LHD004	N/A	03/11/91	03/11/91
HARDNESS	MB3 BS	W	91LHD004	N/A	03/11/91	03/11/91
NITRATE NITRITE	MB1	W	91LNO079	N/A	02/19/91	02/19/91
NITRATE NITRITE	MB1 BS	W	91LNO079	N/A	02/19/91	02/19/91
NITRATE NITRITE	MB2	W	91LNO079	N/A	02/19/91	02/19/91
NITRATE NITRITE	MB2 BS	W	91LNO079	N/A	02/19/91	02/19/91
AMMONIA	MB1	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB1 BS	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB1 BSD	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB2	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB2 BS	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB2 BSD	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB3	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB3 BS	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB3 BSD	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB4	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB4 BS	W	91LAM019	N/A	02/26/91	02/26/91
AMMONIA	MB4 BSD	W	91LAM019	N/A	02/26/91	02/26/91
TOTAL ORGANIC CARBON	MB1	W	91LTC047	N/A	03/11/91	03/11/91
TOTAL ORGANIC CARBON	MB1 BS	W	91LTC047	N/A	03/11/91	03/11/91
TOTAL ORGANIC CARBON	MB1 BSD	W	91LTC047	N/A	03/11/91	03/11/91
TOTAL ORGANIC CARBON	MB2	W	91LTC047	N/A	03/11/91	03/11/91
TOTAL ORGANIC CARBON	MB2 BS	W	91LTC047	N/A	03/11/91	03/11/91
TOTAL ORGANIC CARBON	MB3	W	91LTC047	N/A	03/11/91	03/11/91
TOTAL ORGANIC CARBON	MB3 BS	W	91LTC047	N/A	03/11/91	03/11/91
SULFATE	MB1	W	91LS4012	N/A	02/21/91	02/21/91

9713512.0475

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

DATE RECEIVED: 02/15/91 RFW LOT # :9102L566

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SULFATE	MB1 BS	W	91LS4012	N/A	02/21/91	02/21/91
SULFATE	MB1 BSD	W	91LS4012	N/A	02/21/91	02/21/91
SULFATE	MB2	W	91LS4012	N/A	02/21/91	02/21/91
SULFATE	MB2 BS	W	91LS4012	N/A	02/21/91	02/21/91
SULFATE	MB3	W	91LS4012	N/A	02/21/91	02/21/91
SULFATE	MB3 BS	W	91LS4012	N/A	02/21/91	02/21/91
SPECIFIC CONDUCTANCE	MB1	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB1 BS	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB2	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB2 BS	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB3	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB3 BS	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB4	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB4 BS	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB5	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB5 BS	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB6	W	91LSP012	N/A	02/26/91	02/26/91
SPECIFIC CONDUCTANCE	MB6 BS	W	91LSP012	N/A	02/26/91	02/26/91
TOTAL DISSOLVED SOLI	MB1	W	91LSS012	N/A	02/20/91	02/21/91
TOTAL SUSPENDED SOLI	MB1	W	91LSS012	N/A	02/20/91	02/21/91

200-BP-1 SUMMARY TABLE
Laboratory: WESTON
RFW #: 9102L566

ORGANICS sample value/qualifier (values in ppb)

Parameter	B00DK9	B00DL6	B00DL9	B00DK6
1,3-dichlorobenzene	3 J	ND	ND	ND
di-n-butylphthalate	1 J	2 J	2 J	1 J
fluoranthene	ND	0.8 J	1 J	1 J
pyrene	ND	3 J	4 J	4 J
2-chloro-ethanol phosphate @ 17.12	ND	ND	30 J	ND

NR not reported and/or requested
ND corresponding TIC was not detected

9/5312.0476

9215512.0472

200-BP-1 SUMMARY TABLE
Laboratory: WESTON
RFW #: 9102L566

ORGANIC TARGET COUMPOUND LIST - NON DETECTED COMPOUNDS

Compound	SQL (in ppb)
SEMI-VOA	
phenol	10
bis(2-chloroethyl)ether	10
2-chlorophenol	10
1,4-dichlorobenzene	10
benzyl alcohol	10
1,2-dichlorobenzene	10
2-methylphenol	10
bis(2-chloroisopropyl)ether	10
4-methylphenol	10
N-nitroso-di-n-propylamine	10
hexachloroethane	10
nitrobenzene	10
isophorone	10
2-nitrophenol	10
2,4-dimethylphenol	10
benzoic acid	50
bis(2-chloroethoxy)methane	10
2,4-dichlorophenol	10
1,2,4-trichlorobenzene	10
naphthalene	10
4-chloroaniline	10
hexachlorobutadiene	10
4-chloro-3-methylphenol	10
2-methylnaphthalene	10
hexachlorocyclopentadiene	10
2,4,6-trichlorophenol	10
2,4,5-trichlorophenol	50
2-chloronaphthalene	10
2-nitroaniline	50
dimethylphthalate	10
acenaphthylene	10
2,6-dinitrotoluene	10
3-nitroaniline	50
acenaphthene	10
2,4-dinitrophenol	50
4-nitrophenol	50
dibenzofuran	10
2,4-dinitrotoluene	10
diethylphthalate	10
4-chlorophenyl-phenylether	10

200-BP-1 SUMMARY TABLE
Laboratory: WESTON
RFW #: 9102L566

ORGANIC TARGET COUMPOUND LIST - NON DETECTED COMPOUNDS

Compound	SQL (in ppb)
fluorene	10
4-nitroaniline	50
4,6-dinitro-2-methylphenol	50
N-nitrosodiphenylamine (1)	10
4-bromophenyl-phenylether	10
hexachlorobenzene	10
pentachlorophenol	50
phenanthrene	10
anthracene	10
butylbenzylphthalate	10
3,3'-dichlorobenzidine	20
benzo(a)anthracene	10
chrysene	10
bis(2-ehtylhexyl)phthalate	10
di-n-octylphthalate	10
benzo(b)fluoranthene	10
benzo(k)fluoranthene	10
benzo(a)pyrene	10
indeno(1,2,3-cd)pyrene	10
dibenz(a,h)anthracene	10
benzo(g,h,i)perylene	10

200-BP-1 SUMMARY TABLE
Laboratory: WESTON
RFW #: 9102L566

ORGANIC TARGET COUMPOUND LIST - NON DETECTED COMPOUNDS

NOTE: There were no pest/PCB compounds detected in this group.

Compound	SQL (in ppb)
PESTICIDES	
alpha-BHC	0.050
beta-BHC	0.050
delta-BHC	0.050
gamma-BHC (lindane)	0.050
heptachlor	0.050
aldrin	0.050
heptachlor epoxide	0.050
endosulfan I	0.050
dieldrin	0.10
4,4'-DDE	0.10
endrin	0.10
endosulfan II	0.10
4,4'-DDD	0.10
endosulfan sulfate	0.10
4,4'-DDT	0.10
methoxychlor	0.50
endrin ketone	0.10
alpha-chlordane	0.50
gamma-chlordane	0.50
toxaphene	1.0
aroclor-1016	0.50
aroclor-1221	0.50
aroclor-1232	0.50
aroclor-1242	0.50
aroclor-1248	0.50
aroclor-1254	1.0
aroclor-1260	1.0

CONTRACT LABORATORY PROGRAM DATA QUALIFIER DEFINITIONS

ORGANIC DATA QUALIFIERS

U	The material was analyzed for, but was not detected. The associated value is the sample quantitation limit (SQL).
J	The associated value is an estimated quantity.
UJ	The material was analyzed for, but was not detected. The SQL is an estimated quantity.
R	The data are unusable.

INORGANIC DATA QUALIFIERS

U	The material was analyzed for, but was not detected above the level of the associated value.
J	The associated value is an estimated quantity.
UJ	The material was analyzed for but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable.

200-BP-1 SUMMARY TABLE
Laboratory: WESTON
RFW #: 9102L566

ORGANIC TARGET COUMPOUND LIST - NON DETECTED COMPOUNDS

NOTE: There were no VOA compounds detected in this group.

Compound	SQL (in ppb)
VOLATILES	
chloromethane	10
bromomethane	10
vinyl chloride	10
chloroethane	10
methylene chloride	11-75
acetone	10-21
carbon disulfide	5
1,1-dichloroethene	5
1,1-dichloroethane	5
1,2-dichloroethene (total)	5
chloroform	5
1,2-dichloroethane	5
2-butanone	10
1,1,1-trichloroethane	5
carbon tetrachloride	5
vinyl acetate	10
bromodichloromethane	5
1,2-dichloropropane	5
cis-1,3-dichloropropene	5
trichloroethene	5
dibromochloromethane	5
1,1,2-trichloroethane	5
benzene	5
trans-1,3-dichloropropene	5
bromoform	5
4-methyl-2-pentanone	10
2-hexanone	10
tatrachloroethene	5
1,1,2,2-tetrachloroethane	5
toluene	5
chlorobenzene	5
ethylbenzene	5
styrene	5
xylene (total)	5

Westinghouse Hanford Company

9213512.0482

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 7/6/91

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

RFW 910215566

SAMPLES/MATRIX B00DK9

B00DL6

B00DL9

B00DK6

all water

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Anions IC[1]	NO_2/NO_3	ammonia
1. Holding time		X	O	O
2. Blank Analysis		O	O	O
3. Matrix Spike		O	O	O
4. Duplicate Analysis		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/attached qualifiers

NOTES: CN results previously validated in CLP format: disregard all CN results included in this packages

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

[1]anions IC include: Chloride, Fluoride, Nitrate, Nitrite, Phosphate, Sulfate

54 7910 046

Westinghouse Hanford Company

9713512.0483

OSM RCRA LEVEL C DATA ASSESSMENT (cont pg 2)

DATE 7/6/91

SAMPLES/MATRIX see Cover

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # –

SDG # –

RFW # 9102L566

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	TOC	Sulfate	Alkalinity
1. Holding Time		O	O	X
2. Blank Analysis		O	O	X
3. Matrix Spike		O	O	O
4. Duplicates		O	O	NE
5.				
6.				
7.				
8.				
9.				
10.				

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

OVERALL ASSESSSMENT: see Cover

NOTES: See Cover.

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

SA 7900 046

Westinghouse Hanford Company

9713512.0484

OSM RCRA LEVEL C DATA ASSESSMENT

DATE 7/6/91

SAMPLES/MATRIX See Cover

REVIEWED BY JA Lerch

LABORATORY Weston

CASE # —

SDG # —

RFW # 91021566

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	Hardness	Conductance	TDS
1.	Holding Time	O	O	O
2.	Blank Analysis	O	O	O
3.	Matrix Spike	O	O	N/A
4.	Duplicates	O	NE	NE
5.				
6.				
7.				
8.				
9.				
10.				

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

OVERALL ASSESSSMENT: See cover

NOTES: See cover

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

54 7900 046

RCRA LEVEL C QC

Name JA Lerch Date 7/6/91

QC Check: Holding Time

COMMENTS: Anions - 48 hr holding time exceeded on all samples for applicable analytes

NO_2/NO_3 - all samples analyzed within 28 day holding time

ammonia - all samples analyzed within 28 day holding time

ACTION: qualify associated results as per OSAM guidelines

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

RCRA LEVEL C QC

Name JA Lerch Date 7/6/91

QC Check: Holding time (cont)

COMMENTS: TOC, Sulfate, Conductance - all samples analyzed within 28 days
Alkalinity - 14 day holding time exceeded by 1-2 day on all samples
Hardness - no holding time spec - all samples analyzed within 28 days
TDS - no holding time spec - all samples analyzed within 10 days

ACTION: qualify associated results as per OSM guidelines

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

RCRA LEVEL C QC

Name JA Lerch Date 7/26/91

QC Check: Blank Analysis

COMMENTS: Anions IC: all blanks free of contamination (91LIC06-MB1 and MB2)
NO_2/NO_3 – all blanks free of contamination (91LN0079-MB1 and MB2)
ammonia – all blanks free of contamination (91LAM019-MB1 thru MB4)
TOC – all blanks free of contamination (91LTC047-MB1 thru MB3)
~~ACTION: None~~ TDS – method blank free of contamination (91LSS012-MB1)

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch Date 7/6/91

QC Check: Blank Analysis (cont)

COMMENTS: Sulfate - all blanks free of contamination (91LS4012-MB1 thru MB3)
Alkalinity - trace levels of contamination detected in blanks (91LAL003-MB1 thru MB4)
Hardness - all blanks free of contamination (91LHD004-MB1 thru MB3)
Conductance - all blanks free of contamination (91LSP012-MB1 thru MB6)

ACTION: qualify associated results as per OSM guidelines

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

RCRA LEVEL C QC

Name JA Letch Date 7/6/91

QC Check: Matrix Spike

COMMENTS: Anions, Alkalinity, Hardness, Nitrate/Nitrite, Ammonia, TOC, Sulfate, Conductance — all blank spike recoveries within 80-120%

TOC — MS and MSD recoveries ok for sample B00DK9

ACTION: none

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

9713512.0490

RCRA LEVEL C QC

Name JA Lerch Date 7/6/91

QC Check: Matrix Spike (cont)

COMMENTS: NO_2/NO_3 - spike recovery acceptable for B00DL6 (MS + MSD)
Sulfate-spike recovery acceptable on B00DL6
Ammonia-spike recovery acceptable for B00DK6

ACTION: none

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

9713512.0491

RCRA LEVEL C QC

Name JA Lerch Date 7/6/91

QC Check: Duplicates

COMMENTS: Hardness, Ammonia, TOC, Sulfate - all blank spike and blank spike dup RPD's < 10%

TOC - MS+MSD RPD acceptable for BC0DK9

NO_2/NO_3 - MS + MSD RPD acceptable for BC0DL6

ACTION: none

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

RCRA LEVEL C QC

Name JA Lerch Date 7/6/91

QC Check: Duplicates (cont)

COMMENTS: TOC, TDS – replicate RPD's < 10% on sample B00DK9
NO_2/NO_3, Sulfate – replicate RPD's ok for sample B00DL6
Ammonia – replicate RPD ok for sample B00DK6
Alkalinity, TDS, Anions – no duplicate results reported – not evaluated

ACTION: none

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

9713512.0493

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 03/29/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BOO-DK9	Alkalinity	118	MG/L	2.0
		Chloride by IC	9.3	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	0.81 J	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	18.8	mg/L	0.25
		Hardness	108	MG/L	2.0
		Nitrate Nitrite	456	MG/L	25.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.74	MG/L	0.50
		pH	6.3	PH UNITS	0.10
		Sulfate	16.2	MG/L	5.0
		Specific Conductance	309	UMHOS/CM	1.0
		Total Dissolved Solids	249	MG/L	5.0
-004	BOO-DL6	Alkalinity	102	MG/L	2.0
		Chloride by IC	11.4	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	2.9 J	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	26.1	mg/L	0.25
		Hardness	122	MG/L	2.0
		Nitrate Nitrite	5.0 u	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.64	MG/L	0.50
		pH	6.6	PH UNITS	0.10
		Sulfate	51.8	MG/L	10.0
		Specific Conductance	327	UMHOS/CM	1.0
		Total Dissolved Solids	255	MG/L	5.0
-006	BOO-DL9	Alkalinity	104	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~~	11.7	UG/L	10.0

7/7/91

9713512.0494

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 03/29/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-006	BOO-DL9	Phosphate by IC	0.25 u J	mg/L	0.25
		Sulfate by IC	1.8	mg/L	0.25
		Hardness	172	MG/L	2.0
		Nitrate Nitrite	5.6	MG/L	0.50
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.7	PH UNITS	0.10
		Sulfate	89.6	MG/L	20.0
		Specific Conductance	455	UMHOS/CM	1.0
		Total Dissolved Solids	341	MG/L	5.0
-009	BOO-DK6	Alkalinity	106	MG/L	2.0
		Chloride by IC	25.6	mg/L	0.25
		Fluoride by IC	0.50 u	mg/L	0.50
		Nitrite by IC	0.25 u J	mg/L	0.25
		Nitrate by IC	81.3 J	mg/L	0.25
		~~Cyanide, Total~~	122	UG/L	16.7
		Phosphate by IC	0.25 u J	mg/L	0.25
		Sulfate by IC	65.7	mg/L	0.25
		Hardness	266	MG/L	2.0
		Nitrate Nitrite	26.1	MG/L	2.5
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		pH	7.7	PH UNITS	0.10
		Sulfate	149	MG/L	50.0
		Specific Conductance	666	UMHOS/CM	1.0
		Total Dissolved Solids	497	MG/L	5.0

1/1/91

Westinghouse Hanford Company

9713512.0495

OSM RCRA LEVEL C DATA ASSESSMENT

DATE ~~JA~~ 11/9/91

REVIEWED BY JA Lerch

LABORATORY Weston

~~CASE #~~ RFW 91021538 (also contains 91021566, 599)

SDG # N/A

SAMPLES/MATRIX

B00DL2	B00DL7	B00DM2
B00DL3	B00DL9	B00DM3
B00DK9	B00DM0	all water
B00DL0	B00DK6	
B00DL6	B00DK7	

DATA ASSESSMENT SUMMARY

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

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

OVERALL ASSESSSMENT: no problems – all results acceptable

NOTES: See corresponding CLP report for CASE NARRATIVE, etc.
Disregard all other metals reported in this package – See CLP for results

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

9713512.0496

9713512.0497

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

9713512.0498

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

9713512.0499

RCRA LEVEL C QC

Name JA Lerchf Date 11/9/91

QC Check: Spike Recovery

COMMENTS: Sn, Sr LCS spike & Spike dup recoveries ok; no results reported for Bi
-no Matrix spike performed; other 200-BP-1 samples have shown no problems for Bi, Sr, Sn

ACTION: none

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

9713512.0500

RCRA LEVEL C QC

Name JA Lerch Date 11/9/91

QC Check: Duplicates

COMMENTS: Sr, Sn LS spike & spike dup % diff ok; no results reported for Bi; other 200-BP-1 samples have not shown problems

ACTION: none

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

9713512.0501

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 05/10/91

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

WESTON BATCH #: 9102L538

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	BOODL2	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	2060		UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	200	u	UG/L	200
		Calcium, Total	32100		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	26.4		UG/L	25.0
		Iron, Total	41900		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.2
		Potassium, Total	7210		UG/L	5000
		Magnesium, Total	11300		UG/L	5000
		Manganese, Total	458		UG/L	15.0
		Sodium, Total	16900		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	3.3		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	218		UG/L	100
		Thallium, Total	100	u	UG/L	100
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	30.1		UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L538

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	BOODL3	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	1780		UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	200	u	UG/L	200
		Calcium, Total	31700		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	26.6		UG/L	25.0
		Iron, Total	39300		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.2
		Potassium, Total	7680		UG/L	5000
		Magnesium, Total	11200		UG/L	5000
		Manganese, Total	437		UG/L	15.0
		Sodium, Total	17000		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	6.6		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	218		UG/L	100
		Thallium, Total	100	u	UG/L	100
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	20.8		UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	BOO-DK9	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
		Boron, Total	100	u	UG/L	100
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	200	u	UG/L	200
		Calcium, Total	28100		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	18.1		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	535		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	6910		UG/L	5000
		Magnesium, Total	9590		UG/L	5000
		Manganese, Total	75.2		UG/L	15.0
		Sodium, Total	18800		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	249		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.1		UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

9713512.0505

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	BOO-DLO	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
		Boron, Soluble	100	u	UG/L	100
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	200	u	UG/L	200
		Calcium, Soluble	28500		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.2
		Potassium, Soluble	7230		UG/L	5000
		Magnesium, Soluble	9780		UG/L	5000
		Manganese, Soluble	70.7		UG/L	15.0
		Sodium, Soluble	19300		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	254		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	51.6		UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

9213512.0506

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	BOO-DL6	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
		Boron, Total	100	u	UG/L	100
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	200	u	UG/L	200
		Calcium, Total	32000		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	31.9		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	615		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	8950		UG/L	5000
		Magnesium, Total	9860		UG/L	5000
		Manganese, Total	61.6		UG/L	15.0
		Sodium, Total	21300		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	280		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 05/10/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	BOO-DL7	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
		Boron, Soluble	100	u	UG/L	100
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	200	u	UG/L	200
		Calcium, Soluble	35300		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	8600		UG/L	5000
		Magnesium, Soluble	10700		UG/L	5000
		Manganese, Soluble	56.0		UG/L	15.0
		Sodium, Soluble	21200		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	291		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	55.5		UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-006	BOO-DL9	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
		Boron, Total	100	u	UG/L	100
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	200	u	UG/L	200
		Calcium, Total	47200		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	46.2		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	541		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	7180		UG/L	5000
		Magnesium, Total	14600		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	26300		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	11.3		UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	252		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	62.2		UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-007	BOO-DMO	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
		Boron, Soluble	100	u	UG/L	100
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	200	u	UG/L	200
		Calcium, Soluble	51100		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	7450		UG/L	5000
		Magnesium, Soluble	15600		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	26000		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	6.2		UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	257		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	70.6		UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

9213512.0510

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-009	BOO-DK6	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
		Boron, Total	100	u	UG/L	100
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	200	u	UG/L	200
		Calcium, Total	73900		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	26.4		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	1680		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.2
		Potassium, Total	7330		UG/L	5000
		Magnesium, Total	22300		UG/L	5000
		Manganese, Total	54.0		UG/L	15.0
		Sodium, Total	32200		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	15.3		UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	370		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	56.8		UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L566

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-010	BOO-DK7	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
		Boron, Soluble	100	u	UG/L	100
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	200	u	UG/L	200
		Calcium, Soluble	82200		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	127		UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.2(
		Potassium, Soluble	7640		UG/L	5000
		Magnesium, Soluble	24100		UG/L	5000
		Manganese, Soluble	45.5		UG/L	15.0
		Sodium, Soluble	32400		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	11.3		UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	387		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	65.4		UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L599

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	BOO-DM2	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	200	u	UG/L	200
		Arsenic, Total	10.0	u	UG/L	10.0
		Barium, Total	200	u	UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Bismuth, Total	200	u	UG/L	200
		Calcium, Total	52400		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	85.2		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	421		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	7330		UG/L	5000
		Magnesium, Total	15500		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	25500		UG/L	5000
		Nickel, Total	46.7		UG/L	40.0
		Lead, Total	3.0	u	UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	7.1		UG/L	5.0
		Tin, Total	100	u	UG/L	100
		Strontium, Total	262		UG/L	100
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	73.9		UG/L	50.0
		Zinc, Total	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 05/10/91

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

WESTON BATCH #: 9102L599

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	BOO-DM3	Silver, Soluble	10.0	u	UG/L	10.0
		Aluminum, Soluble	200	u	UG/L	200
		Arsenic, Soluble	10.0	u	UG/L	10.0
		Barium, Soluble	200	u	UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Bismuth, Soluble	200	u	UG/L	200
		Calcium, Soluble	55900		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.2
		Potassium, Soluble	7410		UG/L	5000
		Magnesium, Soluble	16500		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	26900		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		UG/L	5.0
		Tin, Soluble	100	u	UG/L	100
		Strontium, Soluble	280		UG/L	100
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	76.3		UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0