9208L583-WES-827

0044612

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 08-26-92
RFW #: 9208L583, GC/MS VOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of eight (8) water samples collected on 08-22,24-92.

The samples were analyzed according to criteria set forth in CLP SOW 3/90 for TCL Volatile target compounds on 08-28,29, 31-92.

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

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

2. Sample B06PT8 required a five-fold dilution because it contained high levels of target compounds.

3. All system monitoring compound (surrogate) recoveries were within EPA QC limits.

4. All matrix spike recoveries were within EPA QC limits.

5. The laboratory blanks contained the common contaminants Methylene Chloride and Acetone at levels less than 2x the CRQL.

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

Margaret M. Beaty for 10/5/92
J. Peter Hershey, Ph.D. Date
Laboratory Manager
Lionville Analytical Laboratory

drm/08-583.v

FEB 1996
RECEIVED
EDMC

WESTON Analytics Use Only: 9208L583

Custody Transfer Record/Lab Work Request

WESTON

Page 1 of 2

Client: Westinghouse Hanford Co.
Est. Final Proj. Sampling Date:
Work Order #: 6168-02-01-0000
Project Contact/Phone #: P.H. Butcher (509) 376-5045
AD Project Manager: Jessie King
QC: CLP Tel: CLP TAT: 35 day
Date Rec'd: 8-26-92 Date Due: 9-30-92
Account #: WS-Hanford

Refrigerator #		1	1-5		1-3	3	3		1	1		SUB		3
#/Type Container	Liquid	SEE SPECIAL INSTRUCTIONS.												
	Solid	SEE SPECIAL INSTRUCTIONS.												
Volume	Liquid	See Below												
	Solid													
Preservatives		SEE SPECIAL INSTRUCTIONS.												
ANALYSES REQUESTED →		ORGANIC: VOA	BNA	Pest/PCB	Herb	Anions			INORG: Metal	CN				Dis Metals

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

Lab ID	Client ID/Description	MS	MSD	Matrix	Date Collected	Time Collected	060294	060394	060494		Anions	IC/PO4 ITDS ITSS	ICOD ANBN	GHSLTOW		FOCT	ITOX	ISUB		MPSGW
001	B06PP3			W	8/22/92	0740	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓		
002	B06PP4			↓	↓	↓														✓
003	B06PP5			↓	↓	↓	✓													
004	B06PT8			W	8/24/92	11:50	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓		
005	PT9			↓	↓	↓														✓
006	PV0			↓	↓	↓	✓													
007	Q05			↓	8-22-92	0600	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓		
008	Q06			↓	↓	↓														✓
009	Q07			↓	↓	↓	✓													
	Anions = IC Cl, IC F, IC SO4, IC PO4, IC NO2, IC NO3																			

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

DATE/REVISIONS:

Special Instructions: 1) 3, 40mL, aG: CLP-VOA. 2) ~~3, 2L, 1 aG: SEMI-VOA, PCB/PLS.~~ 3) 1, 1L, P: ICP/AA-METAL, Hg (HNO3) (UNFILTERED). 4) 3, 1L, P: TDS, ANIONS, TSS, ALK. 5) 1, 1L, P: AMMONIA, COD (H2SO4) 6) 1, 250mL, aG: TOC (~~INCLUDES BICARBONATE/CARBONATE~~) (H2SO4). 7) 1, 250mL, GS: TOX (H2SO4). 8) 1, 1L, P: GROSS ALPHA, BETA, GAMMA SCAN (HNO3). 9) 1, 1L, P: ICP/AA METALS, Hg (HNO3) (FILTERED).

(1) MS/MSD Required

WESTON Analytics Use Only

Samples were: 1) Shipped ✓ or Hand Delivered __ Airbill #2598 7019-8
2) Ambient or Chilled
3) Received in Good Condition (Y) or N
4) Labels Indicate Properly Preserved (Y) or N
5) Received Within Holding Times Y or (N)
Anions NO2, NO3, PO4

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 Labels and COC Record? Y or (N)
NOTES

Relinquished by	Received by	Date	Time
Emery	[illegible]	8/26/92	13:50
	[illegible] 8-26-92		

Relinquished by	Received by	Date	Time
	[illegible] 8/26/92		

RFW 21-21-001/A-7/91 L372 L373 L375 L377 L378 Ref# Cooler# 167, SmL-158 381 596a

WESTON Analytics Use Only

9208L583

Custody Transfer Record/Lab Work Request

WESTON

Client: Westinghouse Hanford
Est. Final Proj. Sampling Date:
Work Order #: CA C68-02-01-0000
Project Contact/Phone #:
AD Project Manager: Jane Kay
QC: CLP Del: CLP TAT: 31
Date Rec'd: 8-25-92 Date Due: 9-30-92
Account #: ~~WESTS-Hanford~~ WS-Hanford 8-26-92

Refrigerator #		1	H-5		H-3	3	3		1	1		SUB		3
#/Type Container	Liquid													
	Solid													
Volume	Liquid													
	Solid													
Preservatives														
ANALYSES REQUESTED		ORGANIC						INORG						
		VOA	BNA	Pest/PCB	Herb			Metal	CN					

Lee Boze

WESTON Analytics Use Only

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

Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	1	2	3		4	4	5	3		6	9		8		9
010	B06Q23			W	8/24/92		✓	✓	✓		✓	✓	✓	✓		✓	✓		✓		
011	Q24																				✓
012	Q25						✓														

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:

DATE/REVISIONS:
1
2
3
4
5
6

Original Chain of Custody

Relinquished by	Received by	Date	Time
Emery	[illegible]	8/26/92	13:30

Relinquished by	Received by	Date	Time
		8-26-92	

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) Labels Indicate 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

Discrepancies Between Samples Labels and COC Record? Y or N

NOTES

Lee Boze

WESTON.

RFW 21-21-001/A 7/91 L372 L373 L375 L377 L378 Ref# Cooler# KT-3 381 596a

000004

Westinghouse Hanford Company	CHAIN OF CUSTODY 9208L583

Custody Form Initiator PH BUTCHER
Company Contact PH BUTCHER
Proj Designation/Sampling Locations 200AAMS
Ice Chest No. KT-3
Bill of Lading/Airbill No. 250997006-9
Method of Shipment EMERY
Shipped to WESTON
Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045
Collection Date 8/24/92
Field Logbook No. EFL-1032
Offsite Property No. W92-0-0975-16

Sample Identification

B0GG23
3, 40ml, aG, WATER, CLP-VOA
3, 2L, aG, WATER, SEMI-VOA, PCB/PEST
1, 1L, P, WATER, ICP/AA-METAL & Hg (HNO3) UNFILTERED
3, 1L, P, WATER, TDS, ANIONS, TSS, ALK
1, 1L, P, WATER, AMMONIA, COD (H2SO4)
1, 250ml, aG, WATER, TOC(INCLUDES BICARBONATE/CARBONATE (H2SO4)
1, 250ml, Gs, WATER, TOX (H2SO4)
1, 1L, P, WATER, GROSS ALPHA/BETA, GAMMA SCAN (HNO3)

B0GG24
1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B0GG25
3, 40 ml, WATER, CLP-VOA

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
L.D. Walker L.D. Walker	K. Trapp / K. Trapp	8/25/92 1041
K. Trapp / K. Trapp		
Emery	[signature]	8/26/92 13:50

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

000005

Westinghouse Hanford Company	CHAIN OF CUSTODY 9208L583

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling L ıtions 200AAMS

Ice Chest No. EML-193

Bill of Lading/Airbill No. 250987009-9

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date 8/22/92

Field Logbook No. EFC-1032

Offsite Property No. W92-0-0575-15

Sample Identification

B0CC-5
- 3, 40ml, aG, WATER, CLP-VOA
- 3, 2L, aG, WATER, SEMI-VOA, PCB/PEST
- 1, 1L, P, WATER, ICP/AA-METAL & Hg (HNO3) UNFILTERED
- 3, 1L, P, WATER, TDS, ANIONS, TSS, ALK
- 1, 1L, P, WATER, AMMONIA, COD (H2SO4)
- 1, 250ml, aG, WATER, TOC(INCLUDES BICARBONATE/CARBONATE (H2SO4)
- 1, 250ml, Gs, WATER, TOX (H2SO4)
- 1, 1L, P, WATER, GROSS ALPHA/BETA, GAMMA SCAN (HNO3)

B0GGCE
- 1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B0GGC7
- 3, 40 ml, WATER, CLP-VOA

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
P. Ciricili	K. Trapp / K Trapp	8/25/92 1023
K. Trapp / K. Trapp		
Emery		8/26/92 13:50

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

Westinghouse Hanford Company

CHAIN OF CUSTODY

9208L583

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 200AAMS

Collection Date 8-24-92

Ice Chest No. 167

Field Logbook No. EFL-1032

Bill of Lading/Airbill No. 250997009-9

Offsite Property No. W92-0-0575-16

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

Sample Identification

B06F75

3, 40ml, aG, WATER, CLP-VOA
3, 2L, aG, WATER, SEMI-VOA, PCB/PEST
1, 1L, P, WATER, ICP/AA-METAL & Hg (HNO3) UNFILTERED
3, 1L, P, WATER, TDS, ~~BOD, DISOLVED OXYGEN,~~ ANIONS, TSS, ALK
1, 1L, P, WATER, AMMONIA, COD (H2SO4) PSH 8/25/92
1, 250ml, aG, WATER, TOC(INCLUDES BICARBONATE/CARBONATE (H2SO4)
1, 250ml, Gs, WATER, TOX (H2SO4)
1, 1L, P, WATER, GROSS ALPHA/BETA, GAMMA SCAN (HNO3)

B06F76

1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B06F80

3, 40 ml, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: L.D. Walker	Received by: K. Trapp / K. Trapp	Date/Time: 8/25/92 1635
Relinquished by: K. Trapp / K. Trapp	Received by:	Date/Time:
Relinquished by: Emery	Received by:	Date/Time: 8/26/92 13:50
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

000007

Westinghouse Hanford Company	CHAIN OF CUSTODY	9208L583

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 200AAMS

Collection Date 8/22/92

Ice Chest No. SML-154

Field Logbook No. EFL 1032

Bill of Lading/Airbill No. ~~250296~~ 250297004-4

Offsite Property No. W92-0-0575-15

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

Sample Identification

B06FP3

3, 40ml, aG, WATER, CLP-VOA
3, 2L, aG, WATER, SEMI-VOA, PCB/PEST
1, 1L, P, WATER, ICP/AA-METAL & Hg (HNO3) UNFILTERED
3, 1L, P, WATER, TDS, ~~BOD, DISOLVED OXYGEN,~~ ANIONS, TSS, ALK
1, 1L, P, WATER, AMMONIA, COD (H2SO4)
1, 250ml, aG, WATER, TOC(INCLUDES BICARBONATE/CARBONATE (H2SO4)
1, 250ml, Gs, WATER, TOX (H2SO4)
1, 1L, P, WATER, GROSS ALPHA/BETA, GAMMA SCAN (HNO3)

B06FP4

1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B06FP5

3, 40 ml, WATER, CLP-VOA

[] Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: G G Hamilton / G G HAMILTON	Received by: K. Trapp / K. Trapp	Date/Time: 8/25/92 1023
Relinquished by: K Trapp / K. Trapp	Received by:	Date/Time:
Relinquished by: Emery	Received by: [illegible]	Date/Time: 8/26/92 13:50
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

EMERY WORLDWIDE

Shipper's Account Number: 950281585

Shipment Number: 250987009

To: JOSIE KING
RF WESTON INC
208 WELSH POOL ROAD
LIONVILLE PA

Consignee's Account Number: 19341

ESTINGHOUSE SHIPPING DEPT (509) 376-6665
.S. DEPARTMENT OF ENERGY C/O
STINGHOUSE HANFORD
BLDG 1163
55 STEVENS DRIVE
CHLAND WA

Customer's Reference Numbers: W92-0-0575 #15 & #16

COOLER ID: 73#, 72#, 72#
TER SAMPLES

Total Pieces: 4
Total Weight: 290 LBS

FOR INFORMATION ON RATES CALL 1-800 44 EMERY (1-800-443-6379)

Declared Value $

Zip Ship — For shipments within the United States. Shipper has the option to check this box and, by checking, agrees that the Zip Ship conditions, described in the area to the right, apply.

Mark if Emery Packaging is used: Urgent Letter 9X12 — Urgent Pack 12X15

Third Party Account Number

Commodity Code

International Customs Value — International Insurance

Total Transportation Charges — Other Charges/Advance at Origin

3-PKG-A

EMERY WORLDWIDE — A CF Company

SIGNATURE AND TALLY RECORD

60029-46 (8/89) Litho USA

DATE: 08-25-92 SHIPMENT NO.: 250987009 9
SHIPPER: WESTINGHOUSE SHIPPING DEPT (509) 376-66
REFERENCE NO.: W92-0-0575 #15 & #16

SHIPPER NAME AND ADDRESS

WESTINGHOUSE SHIPPING DEPT (509) 376-6665
G2-06B U.S. DEPARTMENT OF ENERGY C/O
WESTINGHOUSE HANFORD COMPANY
2355 STEVENS DRIVE 1163 BUILDING
PO BOX 1970
RICHLAND WA 99352

CONSIGNEE NAME AND ADDRESS

JOSIE KING
RF WESTON INC
208 WELSH POOL ROAD
LIONVILLE PA 19341

92086583

Pieces	Weight	Description/Marks	Emery Authorization No.
4	290 LBS	WATER SAMPLES 4 COOLERS ID: 73#, 73#, 72#, 72#	

EACH PERSON HANDLING OR TAKING CUSTODY OF THIS SHIPMENT MUST SIGN AND COMPLETE THE INFORMATION BELOW

	Name of Person/Company	Transship Point/Destination	Signature of Person Accepting Custody	Time/Date
1.				
2.				
3.				
4.				
5.				
6.	[illegible]	[illegible]	[illegible]	[illegible]
7.	[illegible] Bay FWESTON [illegible]		[illegible]	[illegible]
8.				

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

RFW Batch Number: 9208L583 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 09/28/92 03:55 Page: 1a

	Cust ID:	BO6PP3		BO6PP3		BO6PP3		BO6PP5		BO6PT8		BO6PV0	
Sample Information	RFW#:	001		001 MS		001 MSD		003		004		006	
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	D.F.:	1.00		1.00		1.00		1.00		5.00		1.00	
	Units:	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
Surrogate Recovery	Toluene-d8	101	%	99	%	103	%	106	%	104	%	102	%
	Bromofluorobenzene	102	%	99	%	103	%	101	%	101	%	101	%
	1,2-Dichloroethane-d4	94	%	95	%	98	%	103	%	106	%	101	%
			fl		fl		fl		fl		fl		fl
Chloromethane		10	U	10	U	10	U	10	U	50	U	10	U
Bromomethane		10	U	10	U	10	U	10	U	50	U	10	U
Vinyl Chloride		10	U	10	U	10	U	10	U	50	U	10	U
Chloroethane		10	U	10	U	10	U	10	U	50	U	10	U
Methylene Chloride		5	JB	8	JB	8	JB	3	JB	52	B	11	B
Acetone		10	U	10	U	11	B	6	JB	30	JB	12	B
Carbon Disulfide		10	U	10	U	10	U	10	U	50	U	10	U
1,1-Dichloroethene		10	U	122	%	118	%	10	U	50	U	10	U
1,1-Dichloroethane		10	U	10	U	10	U	10	U	50	U	10	U
1,2-Dichloroethene (total)		10	U	10	U	10	U	10	U	50	U	10	U
Chloroform		10	U	10	U	10	U	2	J	8	J	2	J
1,2-Dichloroethane		10	U	10	U	10	U	10	U	50	U	10	U
2-Butanone		10	U	10	U	10	U	10	U	50	U	10	U
1,1,1-Trichloroethane		10	U	10	U	10	U	10	U	50	U	10	U
Carbon Tetrachloride		10	U	10	U	10	U	10	U	800		10	U
Bromodichloromethane		10	U	10	U	10	U	10	U	50	U	10	U
1,2-Dichloropropane		10	U	10	U	10	U	10	U	50	U	10	U
cis-1,3-Dichloropropene		10	U	10	U	10	U	10	U	50	U	10	U
Trichloroethene		10	U	109	%	107	%	10	U	50	U	10	U
Dibromochloromethane		10	U	10	U	10	U	10	U	50	U	10	U
1,1,2-Trichloroethane		10	U	10	U	10	U	10	U	50	U	10	U
Benzene		10	U	121	%	119	%	10	U	50	U	10	U
trans-1,3-Dichloropropene		10	U	10	U	10	U	10	U	50	U	10	U
Bromoform		10	U	10	U	10	U	10	U	50	U	10	U
4-Methyl-2-pentanone		10	U	10	U	10	U	10	U	50	U	10	U
2-Hexanone		10	U	10	U	10	U	10	U	50	U	10	U
Tetrachloroethene		10	U	10	U	10	U	10	U	50	U	10	U
1,1,2,2-Tetrachloroethane		10	U	10	U	10	U	10	U	50	U	10	U
Toluene		10	U	119	%	118	%	10	U	50	U	10	U

*= Outside of EPA CLP QC limits.

000010

Cust ID:	B06PP3	B06PP3	B06PP3	B06PP5	B06PT8	B06PV0
RFW#:	001	001 MS	001 MSD	003	004	006
Chlorobenzene	10 U	118 %	115 %	10 U	50 U	10 U
Ethylbenzene	10 U	10 U	10 U	10 U	50 U	10 U
Styrene	10 U	10 U	10 U	10 U	50 U	10 U
Xylene (total)	10 U	10 U	10 U	10 U	50 U	10 U

*= Outside of EPA CLP QC limits.

000017

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

RFW Batch Number: 9208L583 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 09/28/92 03:55 Page: 2a

	Cust ID:	B06Q05		B06Q07		B06Q23		B06Q25		VBLK		VBLK	
Sample Information	RFW#:	007		009		010		012		92LVW195-MB1		92LVW197-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	Toluene-d8	98	%	102	%	101	%	100	%	105	%	100	%
	Bromofluorobenzene	95	%	100	%	100	%	97	%	103	%	100	%
	1,2-Dichloroethane-d4	93	%	96	%	97	%	92	%	98	%	99	%
			fl		fl		fl		fl		fl		fl
Chloromethane		10	U	10	U	10	U	10	U	10	U	10	U
Bromomethane		10	U	10	U	10	U	10	U	10	U	10	U
Vinyl Chloride		10	U	10	U	10	U	10	U	10	U	10	U
Chloroethane		10	U	10	U	10	U	10	U	10	U	10	U
Methylene Chloride		6	JB	11	B	5	JB	5	JB	4	J	5	J
Acetone		10	U	10	U	10	U	2	JB	11		15	
Carbon Disulfide		10	U	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethene		10	U	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane		10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethene (total)		10	U	10	U	10	U	10	U	10	U	10	U
Chloroform		10	U	2	J	10	U	2	J	10	U	10	U
1,2-Dichloroethane		10	U	10	U	10	U	10	U	10	U	10	U
2-Butanone		10	U	10	U	10	U	10	U	10	U	10	U
1,1,1-Trichloroethane		10	U	10	U	10	U	10	U	10	U	10	U
Carbon Tetrachloride		10	U	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane		10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloropropane		10	U	10	U	10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene		10	U	10	U	10	U	10	U	10	U	10	U
Trichloroethene		10	U	10	U	10	U	10	U	10	U	10	U
Dibromochloromethane		10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane		10	U	10	U	10	U	10	U	10	U	10	U
Benzene		10	U	10	U	10	U	10	U	10	U	10	U
trans-1,3-Dichloropropene		10	U	10	U	10	U	10	U	10	U	10	U
Bromoform		10	U	10	U	10	U	10	U	10	U	10	U
4-Methyl-2-pentanone		10	U	10	U	10	U	10	U	10	U	10	U
2-Hexanone		10	U	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene		10	U	10	U	10	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane		10	U	10	U	10	U	10	U	10	U	10	U
Toluene		10	U	10	U	10	U	10	U	10	U	10	U

*= Outside of EPA CLP QC limits.

210090

Cust ID:	B06Q05		B06Q07		B06Q23		B06Q25		VBLK		VBLK	
RFW#:	007		009		010		012		92LVW195-MB1		92LVW197-MB1	
Chlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U
Ethylbenzene	10	U	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U	10	U
Xylene (total)	10	U	10	U	10	U	10	U	10	U	10	U

*= Outside of EPA CLP QC limits.

0010013

1A 000029

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BO6PP3

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-001

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

Lab File ID: W082820

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	5	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

000030

CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BO6PP3

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-001

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

Lab File ID: W082820

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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 DATA SHEET

CLIENT SAMPLE NO.

BO6PP5

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-003

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

Lab File ID: W083105

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/31/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	3	JB
67-64-1	Acetone	6	JB
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

000038 CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BO6PP5

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-003

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

Lab File ID: W083105

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/31/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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 DATA SHEET

CLIENT SAMPLE NO.

BO6PT8

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-004

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

Lab File ID: W083111

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/31/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 5.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	50	U
75-09-2	Methylene Chloride	52	B
67-64-1	Acetone	30	JB
75-15-0	Carbon Disulfide	50	U
75-35-4	1,1-Dichloroethene	50	U
75-34-3	1,1-Dichloroethane	50	U
540-59-0	1,2-Dichloroethene (total)	50	U
67-66-3	Chloroform	8	J
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	50	U
71-55-6	1,1,1-Trichloroethane	50	U
56-23-5	Carbon Tetrachloride	800	
75-27-4	Bromodichloromethane	50	U
78-87-5	1,2-Dichloropropane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
79-01-6	Trichloroethene	50	U
124-48-1	Dibromochloromethane	50	U
79-00-5	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
75-25-2	Bromoform	50	U
108-10-1	4-Methyl-2-pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-88-3	Toluene	50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
100-42-5	Styrene	50	U
1330-20-7	Xylene (total)	50	U

1E 000047

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PT8

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-004

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

Lab File ID: W083111

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/31/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 5.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

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

1A

0000059

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06PV0

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-006

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

Lab File ID: W082825

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	12	B
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E 000060 CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BO6PV0

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-006

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

Lab File ID: W082825

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

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

1A

000067 CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

B06Q05

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-007

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

Lab File ID: W082826

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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

1E

0 0 0 0 0 6 8

CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06Q05

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-007

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

Lab File ID: W082826

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

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

1A

000073

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06Q07

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-009

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

Lab File ID: W082827

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

000074 CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06Q07

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-009

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

Lab File ID: W082827

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

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 DATA SHEET

CLIENT SAMPLE NO.

B06Q23

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-010

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

Lab File ID: W082828

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	5	JB
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

000081

CLIENT SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B06Q23

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-010

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

Lab File ID: W082828

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

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

000055

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06Q25

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-012

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

Lab File ID: W082829

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
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	5	JB
67-64-1	Acetone	2	JB
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06Q25

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-012

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

Lab File ID: W082829

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: not dec.

Date Analyzed: 08/29/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 1.00

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs found: 0

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

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

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

Report Date: 09/30/92 21:15

RFW Batch Number: 9208L583 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000

	Cust ID:	B06PP3	B06PP3	B06PP3	B06PT8	B06Q05	B06Q23
Sample Information	RFW#:	001	001 MS	001 MSD	004	007	010
	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	66 %	62 %	73 %	66 %	67 %	87 %
	2-Fluorobiphenyl	62 %	60 %	69 %	59 %	62 %	81 %
	Terphenyl-d14	93 %	87 %	90 %	94 %	90 %	88 %
	Phenol-d5	70 %	66 %	74 %	65 %	68 %	73 %
	2-Fluorophenol	66 %	61 %	68 %	63 %	65 %	90 %
	2,4,6-Tribromophenol	98 %	95 %	103 %	89 %	89 %	103 %
	2-Chlorophenol-d4	67 %	63 %	71 %	64 %	66 %	88 %
	1,2-Dichlorobenzene-d4	51 %	48 %	52 %	51 %	52 %	65 %
		fl	fl	fl	fl	fl	fl
Phenol		10 U	89 %	100 %	10 U	10 U	10 U
bis(2-Chloroethyl)ether		10 U	18 U	18 U	10 U	10 U	10 U
2-Chlorophenol		10 U	78 %	87 %	10 U	10 U	10 U
1,3-Dichlorobenzene		10 U	18 U	18 U	10 U	10 U	10 U
1,4-Dichlorobenzene		10 U	50 %	56 %	10 U	10 U	10 U
1,2-Dichlorobenzene		10 U	18 U	18 U	10 U	10 U	10 U
2-Methylphenol		10 U	18 U	18 U	10 U	10 U	10 U
2,2'-oxybis(2-Chloropropane)		10 U	18 U	18 U	10 U	10 U	10 U
4-Methylphenol		10 U	18 U	18 U	10 U	10 U	10 U
N-Nitroso-di-n-propylamine		10 U	80 %	91 %	10 U	10 U	10 U
Hexachloroethane		10 U	18 U	18 U	10 U	10 U	10 U
Nitrobenzene		10 U	18 U	18 U	10 U	10 U	10 U
Isophorone		10 U	18 U	18 U	10 U	10 U	10 U
2-Nitrophenol		10 U	18 U	18 U	10 U	10 U	10 U
2,4-Dimethylphenol		10 U	18 U	18 U	10 U	10 U	10 U
bis(2-Chloroethoxy)methane		10 U	18 U	18 U	10 U	10 U	10 U
2,4-Dichlorophenol		10 U	18 U	18 U	10 U	10 U	10 U
1,2,4-Trichlorobenzene		10 U	62 %	70 %	10 U	10 U	10 U
Naphthalene		10 U	18 U	18 U	10 U	10 U	10 U
4-Chloroaniline		10 U	18 U	18 U	10 U	10 U	10 U
Hexachlorobutadiene		10 U	18 U	18 U	10 U	10 U	10 U
4-Chloro-3-methylphenol		10 U	94 %	110 * %	10 U	10 U	10 U
2-Methylnaphthalene		10 U	18 U	18 U	10 U	10 U	10 U
Hexachlorocyclopentadiene		10 U	18 U	18 U	10 U	10 U	10 U

*= Outside of EPA CLP QC limits.

000010

Cust ID:	B06PP3		B06PP3		B06PP3		B06PT8		B06Q05		B06Q23	
RFW#:	001		001 MS		001 MSD		004		007		010	
2,4,6-Trichlorophenol	10	U	18	U	18	U	10	U	10	U	10	U
2,4,5-Trichlorophenol	25	U	46	U	46	U	25	U	25	U	25	U
2-Chloronaphthalene	10	U	18	U	18	U	10	U	10	U	10	U
2-Nitroaniline	25	U	46	U	46	U	25	U	25	U	25	U
Dimethylphthalate	10	U	18	U	18	U	10	U	10	U	10	U
Acenaphthylene	10	U	18	U	18	U	10	U	10	U	10	U
2,6-Dinitrotoluene	10	U	18	U	18	U	10	U	10	U	10	U
3-Nitroaniline	25	U	46	U	46	U	25	U	25	U	25	U
Acenaphthene	10	U	84	%	96	%	10	U	10	U	10	U
2,4-Dinitrophenol	25	U	46	U	46	U	25	U	25	U	25	U
4-Nitrophenol	25	U	132 *	%	146 *	%	25	U	25	U	25	U
Dibenzofuran	10	U	18	U	18	U	10	U	10	U	10	U
2,4-Dinitrotoluene	10	U	121 *	%	133 *	%	10	U	10	U	10	U
Diethylphthalate	10	U	18	U	18	U	10	U	0.7	J	0.8	J
4-Chlorophenyl-phenylether	10	U	18	U	18	U	10	U	10	U	10	U
Fluorene	10	U	18	U	18	U	10	U	10	U	10	U
4-Nitroaniline	25	U	46	U	46	U	25	U	25	U	25	U
4,6-Dinitro-2-methylphenol	25	U	46	U	46	U	25	U	25	U	25	U
N-Nitrosodiphenylamine (1)	10	U	18	U	18	U	10	U	10	U	10	U
4-Bromophenyl-phenylether	10	U	18	U	18	U	10	U	10	U	10	U
Hexachlorobenzene	10	U	18	U	18	U	10	U	10	U	10	U
Pentachlorophenol	25	U	110 *	%	146 *	%	25	U	25	U	25	U
Phenanthrene	10	U	18	U	18	U	10	U	10	U	10	U
Anthracene	10	U	18	U	18	U	10	U	10	U	10	U
Carbazole	10	U	18	U	18	U	10	U	10	U	10	U
Di-n-butylphthalate	7	JB	5	JB	5	JB	7	JB	8	JB	2	JB
Fluoranthene	10	U	18	U	18	U	10	U	10	U	10	U
Pyrene	10	U	121	%	120	%	10	U	10	U	10	U
Butylbenzylphthalate	10	U	18	U	18	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	10	U	18	U	18	U	10	U	10	U	10	U
Benzo(a)anthracene	10	U	18	U	18	U	10	U	10	U	10	U
Chrysene	10	U	18	U	18	U	10	U	10	U	10	U
bis(2-Ethylhexyl)phthalate	3	JB	4	JB	3	JB	6	JB	4	JB	4	JB
Di-n-octyl phthalate	10	U	18	U	18	U	10	U	10	U	10	U
Benzo(b)fluoranthene	10	U	18	U	18	U	10	U	10	U	10	U
Benzo(k)fluoranthene	10	U	18	U	18	U	10	U	10	U	10	U
Benzo(a)pyrene	10	U	18	U	18	U	10	U	10	U	10	U
Indeno(1,2,3-cd)pyrene	10	U	18	U	18	U	10	U	10	U	10	U
Dibenz(a,h)anthracene	10	U	18	U	18	U	10	U	10	U	10	U
Benzo(g,h,i)perylene	10	U	18	U	18	U	10	U	10	U	10	U

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

100019

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLE(S) RECEIVED:** 08-26-92
RFW #: 9208L583, SEMIVOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of four (4) water samples collected on 08-22,24-92.

The samples were extracted on 08-28-92 and analyzed according to criteria set forth in CLP SOW 03/90 for TCL Semivolatile target compounds on 09-15-92.

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

1. Non-target compounds were detected in these samples.

2. All surrogate recoveries were within EPA QC limits.

3. Seven (7) of twenty-two (22) matrix spike recoveries were outside EPA QC limits.

4. One (1) of eleven (11) blank spike recoveries was outside EPA QC limits.

5. The laboratory blank 92LE1454-MB1 contained the common contaminants Di-n-butylphthalate and Bis(2-ethylhexyl)phthalate at levels less than 2X the CRQL.

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

10.06.92
Date

J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

kls/08-583b.cn

1B 000028 CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06PP3

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER Lab Sample ID: 9208L583-001

Sample wt/vol: 1000 (g/mL) ML Lab File ID: M091425

Level: (low/med) LOW Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__ Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/15/92

Injection Volume: 2.0(uL) Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(2-Chloropropane)	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
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	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

000029

CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BO6PP3

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-001

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

Lab File ID: M091425

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	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	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	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	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	7	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	JB
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PP3

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-001

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

Lab File ID: M091425

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	22.45	2	BJ
2.	UNKNOWN	24.10	4	BJ
3.	UNKNOWN	24.55	10	BJ

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06PT8

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-004

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

Lab File ID: M091428

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(2-Chloropropane)	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
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	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BO6PT8

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-004

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

Lab File ID: M091428

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	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	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	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	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	7	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	6	JB
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06PT8

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-004

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

Lab File ID: M091428

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	22.45	2	BJ
2.	UNKNOWN	24.10	3	BJ
3.	UNKNOWN	24.55	20	BJ

000062

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06Q05

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-007

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

Lab File ID: M091429

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(2-Chloropropane)	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
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	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06Q05

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-007

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

Lab File ID: M091429

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	0.7	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	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	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	8	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	JB
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06Q05

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-007

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

Lab File ID: M091429

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.0

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOHEXANOL	4.88	7	BJ
2.	SILOXANE	6.48	8	J
3.	ALDOL CONDENSATE	6.83	4	JA
4.	UNKNOWN	10.42	2	J
5.	UNKNOWN	22.42	2	BJ
6.	UNKNOWN	24.07	4	BJ
7.	UNKNOWN	24.50	20	BJ

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06Q23

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-010

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

Lab File ID: M091430

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
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
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(2-Chloropropane)	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
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	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06Q23

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-010

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

Lab File ID: M091430

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	0.8	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	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	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	2	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	JB
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06Q23

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

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-010

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

Lab File ID: M091430

Level: (low/med) LOW

Date Received: 08/26/92

% Moisture: _____ decanted: (Y/N)__

Date Extracted: 08/28/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/15/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.0

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	CYCLOHEXANOL	4.88	30	BJ
2.	UNKNOWN	5.18	2	J
3.	UNKNOWN	24.50	10	BJ

Roy F. Weston, Inc. - Lionville Laboratory
Pesticide/PCBs by GC, CLP List

Report Date: 10/29/92 14:24

RFW Batch Number: 9208L583 Client: WESTINGHOUSE HANFORD Work Order: 06168-002-001-0000-00

	Cust ID:	B06PP3	B06PP3	B06PP3	B06PP3	B06PP3	B06PP3
Sample Information	RFW#:	001	001	001 MS	001 MS	001 MSD	001 MSD
	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
			CONFIRM		CONFIRM		CONFIRM
Surrogate:	Tetrachloro-m-xylene	55 * %	60 %	60 %	60 %	60 %	60 %
Surrogate:	Decachlorobiphenyl	75 %	70 %	60 %	55 * %	80 %	75 %
		fl	fl	fl	fl	fl	fl
Alpha-BHC		0.056 U	NA	0.056 U	NA	0.056 U	NA
Beta-BHC		0.056 U	NA	0.056 U	NA	0.056 U	NA
Delta-BHC		0.056 U	NA	0.056 U	NA	0.056 U	NA
gamma-BHC (Lindane)		0.056 U	NA	66 %	64 %	70 %	66 %
Heptachlor		0.056 U	NA	56 %	50 %	56 %	52 %
Aldrin		0.17	0.056 U	30 * %	44 %	36 * %	48 %
Heptachlor epoxide		0.056 U	NA	0.056 U	NA	0.056 U	NA
Endosulfan I		0.056 U	NA	0.056 U	NA	0.056 U	NA
Dieldrin		0.11 U	NA	70 %	69 %	73 %	72 %
4,4'-DDE		0.11 U	NA	0.11 U	NA	0.11 U	NA
Endrin		0.11 U	NA	75 %	64 %	79 %	62 %
Endosulfan II		0.11 U	NA	0.11 U	NA	0.11 U	NA
4,4'-DDD		0.11 U	NA	0.11 U	NA	0.11 U	NA
Endosulfan sulfate		0.11 U	NA	0.11 U	NA	0.11 U	NA
4,4'-DDT		0.11 U	NA	76 %	77 %	84 %	84 %
Methoxychlor		0.56 U	NA	0.56 U	NA	0.56 U	NA
Endrin ketone		0.11 U	NA	0.11 U	NA	0.11 U	NA
Endrin aldehyde		0.11 U	NA	0.11 U	NA	0.11 U	NA
alpha-Chlordane		0.056 U	NA	0.056 U	NA	0.056 U	NA
gamma-Chlordane		0.056 U	NA	0.056 U	NA	0.056 U	NA
Toxaphene		5.6 U	NA	5.6 U	NA	5.6 U	NA
Aroclor-1016		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1221		2.2 U	NA	2.2 U	NA	2.2 U	NA
Aroclor-1232		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1242		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1248		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1254		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1260		1.1 U	NA	1.1 U	NA	1.1 U	NA

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not requested. NS= Not spiked.
%= Percent recovery. Z= Diluted out. I= Interference. NA= Not Applicable. *= Outside of EPA CLP QC

000005

Roy F. Weston, Inc. - Lionville Laboratory
Pesticide/PCBs by GC, CLP List

Report Date: 10/29/92 14:24

RFW Batch Number: 9208L583 Client: WESTINGHOUSE HANFORD Work Order: 06168-002-001-0000-00

	Cust ID:	B06PT8	B06PT8	B06Q05	B06Q05	B06Q23	B06Q23
Sample Information	RFW#:	004	004	007	007	010	010
	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
			CONFIRM		CONFIRM		CONFIRM
Surrogate:	Tetrachloro-m-xylene	65 %	70 %	60 %	60 %	55 * %	55 * %
Surrogate:	Decachlorobiphenyl	75 %	70 %	75 %	65 %	80 %	75 %
		fl	fl	fl	fl	fl	fl
Alpha-BHC		0.056 U	NA	0.056 U	NA	0.056 U	NA
Beta-BHC		0.056 U	NA	0.056 U	NA	0.056 U	NA
Delta-BHC		0.056 U	NA	0.056 U	NA	0.056 U	NA
gamma-BHC (Lindane)		0.056 U	NA	0.056 U	NA	0.056 U	NA
Heptachlor		0.056 U	NA	0.056 U	NA	0.056 U	NA
Aldrin		0.20	0.056 U	0.056 U	NA	0.056 U	NA
Heptachlor epoxide		0.056 U	NA	0.056 U	NA	0.056 U	NA
Endosulfan I		0.056 U	NA	0.056 U	NA	0.056 U	NA
Dieldrin		0.11 U	NA	0.11 U	NA	0.11 U	NA
4,4'-DDE		0.11 U	NA	0.11 U	NA	0.11 U	NA
Endrin		0.11 U	NA	0.11 U	NA	0.11 U	NA
Endosulfan II		0.11 U	NA	0.11 U	NA	0.11 U	NA
4,4'-DDD		0.11 U	NA	0.11 U	NA	0.11 U	NA
Endosulfan sulfate		0.11 U	NA	0.11 U	NA	0.11 U	NA
4,4'-DDT		0.11 U	NA	0.11 U	NA	0.11 U	NA
Methoxychlor		0.56 U	NA	0.56 U	NA	0.56 U	NA
Endrin ketone		0.11 U	NA	0.11 U	NA	0.11 U	NA
Endrin aldehyde		0.11 U	NA	0.11 U	NA	0.11 U	NA
alpha-Chlordane		0.056 U	NA	0.056 U	NA	0.056 U	NA
gamma-Chlordane		0.056 U	NA	0.056 U	NA	0.056 U	NA
Toxaphene		5.6 U	NA	5.6 U	NA	5.6 U	NA
Aroclor-1016		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1221		2.2 U	NA	2.2 U	NA	2.2 U	NA
Aroclor-1232		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1242		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1248		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1254		1.1 U	NA	1.1 U	NA	1.1 U	NA
Aroclor-1260		1.1 U	NA	1.1 U	NA	1.1 U	NA

U= Analyzed, not detected. J= Present below detection limit. B= Present in blank. NR= Not requested. NS= Not spiked.
%= Percent recovery. Z= Diluted out. I= Interference. NA= Not Applicable. *= Outside of EPA CLP QC

000006

8A

ROY F. WESTON, INC.
LIONVILLE ANALYTICAL LABORATORY
ANALYTICAL CASE NARRATIVE

Client: WESTINGHOUSE HANFORD
RFW #: 9208L583

W.O. #: 06168-002-001-0000-00
Date Received: 08-26-92

PESTICIDE/PCB

The set of samples consisted of four (4) water samples collected on 08-22,24-92.

The samples were extracted on 08-31-92 and analyzed according to criteria set forth in the Contract Laboratory Program 03/90 SOW for Pesticide and PCB target compounds on 10-01-92.

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

1. Linearity and breakdown criteria were met for each of the analytical columns.

2. Retention time criteria were met for all compounds on both analytical columns.

3. Resolution of all pesticides in the Resolution Check Standard were within EPA QC limits.

4. The RPDs of the pesticides in the individual mixes analyzed for calibration verification were within 25% for both analytical columns.

5. The RPDs of the pesticides in the Performance Evaluation Mixes analyzed for calibration verification were within 25% for both analytical columns.

6. Eight (8) of thirty-two (32) surrogate recoveries were outside the EPA QC limits. The following surrogate recoveries were outside the EPA QC limits of 60%-150%.

	% Recoveries			
Sample ID	TCX1	TCX2	DCB1	DCB2
B06PP3	55	-	-	-
B06PP3 MS	-	-	-	55
B06Q23	55	55	-	-
92LE1464-MB1S	55	55	55	50

WESTON

7. All blank spike recoveries were within EPA QC limits.

8. Two (2) of twenty-four (24) matrix spike recoveries were outside EPA QC limits. The matrix spike recoveries for Aldrin (30% and 36%) were outside the EPA QC limit of 40%.

9. Recoveries of pesticides for the Florisil Cartridge Check were within EPA QC limits.

Margaret M. Beaty for
J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

11/2/92
Date

sma/pcb/08-583pp.cn

1D

000017 CLIENT SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

BO6PP3

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-0000-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER — Lab Sample ID: 9208L583-001

Sample wt/vol: 900 (g/mL) ML — Lab File ID: 09309235.19

% Moisture: decanted: (Y/N)_ — Date Received: 08/26/92

Extraction: (SepF/Cont/Sonc) SONC — Date Extracted: 08/31/92

Concentrated Extract Volume: 10000.00(uL) — Date Analyzed: 10/01/92

Injection Volume: 0.5(uL) — Dilution Factor: 1.00

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	Alpha-BHC	0.056	U
319-85-7	Beta-BHC	0.056	U
319-86-8	Delta-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
1024-57-3	Heptachlor epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
60-57-1	Dieldrin	0.11	U
72-55-9	4,4'-DDE	0.11	U
72-20-8	Endrin	0.11	U
33213-65-9	Endosulfan II	0.11	U
72-54-8	4,4'-DDD	0.11	U
1031-07-8	Endosulfan sulfate	0.11	U
50-29-3	4,4'-DDT	0.11	U
72-43-5	Methoxychlor	0.56	U
53494-70-5	Endrin ketone	0.11	U
7421934	Endrin aldehyde	0.11	U
5103-71-9	alpha-Chlordane	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
8001-35-2	Toxaphene	5.6	U
12674-11-2	Aroclor-1016	1.1	U
11104-28-2	Aroclor-1221	2.2	U
11141-16-5	Aroclor-1232	1.1	U
53469-21-9	Aroclor-1242	1.1	U
12672-29-6	Aroclor-1248	1.1	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U

BS 10-28-92

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

BO6PT8

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-0000-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-004

Sample wt/vol: 900 (g/mL) ML

Lab File ID: 09309235.20

% Moisture: decanted: (Y/N)

Date Received: 08/26/92

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 08/31/92

Concentrated Extract Volume: 10000.00 (uL)

Date Analyzed: 10/01/92

Injection Volume: 0.5 (uL)

Dilution Factor: 1.00

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

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	Alpha-BHC	0.056	U
319-85-7	Beta-BHC	0.056	U
319-86-8	Delta-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
1024-57-3	Heptachlor epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
60-57-1	Dieldrin	0.11	U
72-55-9	4,4'-DDE	0.11	U
72-20-8	Endrin	0.11	U
33213-65-9	Endosulfan II	0.11	U
72-54-8	4,4'-DDD	0.11	U
1031-07-8	Endosulfan sulfate	0.11	U
50-29-3	4,4'-DDT	0.11	U
72-43-5	Methoxychlor	0.56	U
53494-70-5	Endrin ketone	0.11	U
7421934	Endrin aldehyde	0.11	U
5103-71-9	alpha-Chlordane	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
8001-35-2	Toxaphene	5.6	U
12674-11-2	Aroclor-1016	1.1	U
11104-28-2	Aroclor-1221	2.2	U
11141-16-5	Aroclor-1232	1.1	U
53469-21-9	Aroclor-1242	1.1	U
12672-29-6	Aroclor-1248	1.1	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U

DG 10-29-92

0000031

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06Q05

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-0000-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-007

Sample wt/vol: 900 (g/mL) ML

Lab File ID: 09309235.21

% Moisture: decanted: (Y/N)_

Date Received: 08/26/92

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 08/31/92

Concentrated Extract Volume: 10000.00 (uL)

Date Analyzed: 10/01/92

Injection Volume: 0.5 (uL)

Dilution Factor: 1.00

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

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	Alpha-BHC	0.056	U
319-85-7	Beta-BHC	0.056	U
319-86-8	Delta-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
1024-57-3	Heptachlor epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
60-57-1	Dieldrin	0.11	U
72-55-9	4,4'-DDE	0.11	U
72-20-8	Endrin	0.11	U
33213-65-9	Endosulfan II	0.11	U
72-54-8	4,4'-DDD	0.11	U
1031-07-8	Endosulfan sulfate	0.11	U
50-29-3	4,4'-DDT	0.11	U
72-43-5	Methoxychlor	0.56	U
53494-70-5	Endrin ketone	0.11	U
7421934	Endrin aldehyde	0.11	U
5103-71-9	alpha-Chlordane	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
8001-35-2	Toxaphene	5.6	U
12674-11-2	Aroclor-1016	1.1	U
11104-28-2	Aroclor-1221	2.2	U
11141-16-5	Aroclor-1232	1.1	U
53469-21-9	Aroclor-1242	1.1	U
12672-29-6	Aroclor-1248	1.1	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U

DS 10-29-92

0000038

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06Q23

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-0000-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9208L583-010

Sample wt/vol: 900 (g/mL) ML

Lab File ID: 09309235.22

% Moisture: decanted: (Y/N)

Date Received: 08/26/92

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 08/31/92

Concentrated Extract Volume: 10000.00 (uL)

Date Analyzed: 10/01/92

Injection Volume: 0.5 (uL)

Dilution Factor: 1.00

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

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	Alpha-BHC	0.056	U
319-85-7	Beta-BHC	0.056	U
319-86-8	Delta-BHC	0.056	U
58-89-9	gamma-BHC (Lindane)	0.056	U
76-44-8	Heptachlor	0.056	U
309-00-2	Aldrin	0.056	U
1024-57-3	Heptachlor epoxide	0.056	U
959-98-8	Endosulfan I	0.056	U
60-57-1	Dieldrin	0.11	U
72-55-9	4,4'-DDE	0.11	U
72-20-8	Endrin	0.11	U
33213-65-9	Endosulfan II	0.11	U
72-54-8	4,4'-DDD	0.11	U
1031-07-8	Endosulfan sulfate	0.11	U
50-29-3	4,4'-DDT	0.11	U
72-43-5	Methoxychlor	0.56	U
53494-70-5	Endrin ketone	0.11	U
7421934	Endrin aldehyde	0.11	U
5103-71-9	alpha-Chlordane	0.056	U
5103-74-2	gamma-Chlordane	0.056	U
8001-35-2	Toxaphene	5.6	U
12674-11-2	Aroclor-1016	1.1	U
11104-28-2	Aroclor-1221	2.2	U
11141-16-5	Aroclor-1232	1.1	U
53469-21-9	Aroclor-1242	1.1	U
12672-29-6	Aroclor-1248	1.1	U
11097-69-1	Aroclor-1254	1.1	U
11096-82-5	Aroclor-1260	1.1	U

DG 10-29-92

RECORD COPY

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLE(S) RECEIVED:** 08-26-92
RFW #: 9208L583
W.O. #: 6168-02-01

INORGANIC NARRATIVE

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

1. Sample holding times as required by 40CFR136 were met with the exception of Nitrite by IC, Nitrate by IC and Phosphate by IC (received past hold).

2. All preparation blank results were below the required detection limit.

3. All laboratory control standards (blank spikes) were within the control limits of 80-120% (70-130% for Total Organic Halides). All %RPD were within the 20% (40% for Total Organic Halides) guidance limit.

4. All calibration verification checks were within the required control limits of 90-110%. Calibration verification is performed using independent standards.

5. Matrix spike recoveries are summarized on the Inorganic Accuracy Report contained within this document. All recoveries were within the 75-125% (70-130% for Total Organic Halides) guidance limits. All %RPD were within the 20% guidance limit.

6. Replicate results are summarized on the Inorganic Precision Report contained within this document. All results were within the 20% (40% for Total Organic Halides) RPD guidance limit.

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

Margaret M. Beaty for 10/2/92
J. Peter Hershey, Ph.D. Date
Laboratory Manager
Lionville Analytical Laboratory

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pas/i08-583

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 09/28/92

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

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BO6PP3	Alkalinity	140	MG/L	2.0
		Chloride by IC	8.3	MG/L	0.25
		Fluoride by IC	0.59	MG/L	0.50
		Nitrite by IC	0.25 u	MG/L	0.25
		Nitrate by IC	22.5	MG/L	5.0
		Chemical Oxygen Demand	5.0 u	MG/L	5.0
		Phosphate by IC	0.25 u	MG/L	0.25
		Sulfate by IC	36.8	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		Total Dissolved Solids	241	MG/L	5.0
		Total Organic Halides	20.0 u	UG/L	20.0
		Total Suspended Solids	5.0 u	MG/L	5.0
-004	BO6PT8	Alkalinity	110	MG/L	2.0
		Chloride by IC	38.0	MG/L	5.0
		Fluoride by IC	0.50 u	MG/L	0.50
		Nitrite by IC	0.25 u	MG/L	0.25
		Nitrate by IC	49.2	MG/L	5.0
		Chemical Oxygen Demand	5.0 u	MG/L	5.0
		Phosphate by IC	0.25 u	MG/L	0.25
		Sulfate by IC	56.9	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		Total Dissolved Solids	298	MG/L	5.0
		Total Organic Halides	46.9	UG/L	5.0
		Total Suspended Solids	92.0	MG/L	5.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 09/28/92

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

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-007	BO6Q05	Alkalinity	115	MG/L	2.0
		Chloride by IC	9.8	MG/L	0.25
		Fluoride by IC	0.58	MG/L	0.50
		Nitrite by IC	0.25 u	MG/L	0.25
		Nitrate by IC	4.9	MG/L	0.25
		Chemical Oxygen Demand	8.1	MG/L	5.0
		Phosphate by IC	0.25 u	MG/L	0.25
		Sulfate by IC	37.3	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		Total Dissolved Solids	219	MG/L	5.0
		Total Organic Halides	5.0 u	UG/L	5.0
		Total Suspended Solids	27.0	MG/L	5.0
-010	BO6Q23	Alkalinity	130	MG/L	2.0
		Chloride by IC	8.7	MG/L	0.25
		Fluoride by IC	0.51	MG/L	0.50
		Nitrite by IC	0.25 u	MG/L	0.25
		Nitrate by IC	59.2	MG/L	5.0
		Chemical Oxygen Demand	5.0 u	MG/L	5.0
		Phosphate by IC	0.25 u	MG/L	0.25
		Sulfate by IC	61.4	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	0.50 u	MG/L	0.50
		Total Dissolved Solids	250	MG/L	5.0
		Total Organic Halides	5.0 u	UG/L	5.0
		Total Suspended Solids	5.0 u	MG/L	5.0

ROY F. WESTON, INC.
LIONVILLE ANALYTICAL LABORATORY
ANALYTICAL CASE NARRATIVE

Client: WESTINGHOUSE HANFORD
RFW #: 9208L583

W.O. #: 6168-02-01
Date Received: 08-26-92

CLP METALS

The set of samples consisted of eight (8) water samples collected on 08-22 and 08-24-92.

The samples were analyzed according to criteria set forth in CLP SOW 3/90.

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

1. ICVs, CCVs, and LCSs stock standards were purchased from Inorganic Ventures Laboratory.

2. All ICV and CCV values were within control limits.

3. All ICB and CCB values were within control limits.

4. All preparation blank values were within control limits.

5. All LCS results were within the 80-120% control limits with the exception of silver on batch #92L2176-LC1 which was outside the control limits. However, based on control chart studies of laboratory control standards, internal control limits of 60-120% for water and 50-120% for soil samples were established for this laboratory.

6. All matrix spike recoveries were within the 75-125% control limits with the exceptions of lead, mercury, selenium and thallium. All exceptions are flagged with a "N" on the CLP forms.

7. All duplicate analyses were within the 20% RPD control limit with the exception of silver. All exceptions are flagged with a "*" on the CLP forms.

8. Lead sample results were calculated by the method of standard addition (MSA). All corresponding samples were flagged with a "S" according to CLP protocol.

9. For MSA, results reported on Form 8 are calculated from absorbance values. Results reported on other forms are based on concentration. As indicated in the SOWILM01.0, page B-32, differences due to rounding may be found between the MSA values on Form 8 and the results reported on the other forms.

WESTON

10. The code CV is currently in use by the laboratory for both mercury instruments in operation (HG1 and HG2). HG1 is complete with autosampler and software, but still requires manual digestion; HG2 is operated by the analyst, produces a strip chart and also requires manual digestion.

11. HG1 requires less total volume of digestate due to the autosampler analysis. Sample volumes and reagents for mercury determinations in water and soil have been proportionally scaled down to adapt to this semi-automated technique. The sample volume used for water analysis is 33 ml. For soils, 0.1 gram of sample is taken to a final volume of 50 ml (including all reagents).

12. Quarterly Detection Limits, ICP Interelement Correction Factors and ICP Linear Ranges for IC3 are included in this package, but do not appear on EDD.

13. The graphite furnace time that appears on form XIV is the time of the first injection. The time that appears on the data is the print time.

Margaret M. Brady for
J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

11/3/92
Date

mlj/clp-met.nar

ROY F. WESTON, INC.
LIONVILLE ANALYTICAL LABORATORY
ANALYTICAL CASE NARRATIVE

Client: WESTINGHOUSE HANFORD
RFW #: 9208L583

W.O. #: 6168-02-01
Date Received: 08-26-92

CLP METALS ADDENDUM

1. Following Exhibit E, Section V, Item 10, page E-23 of the USEPA Statement of Work for Inorganics Analysis, Document Number ILM02.0 ICP Instrument Detection Limits (IDLs) are reported for two (2) ICP instruments. The instrument identification numbers are "IC1" and "IC3". The highest IDL for the two instruments is used for reporting concentration values in this sample data package.

2. A discrepancy exists between raw data and Form XIVs analytical spikes recovery calculations performed for graphite furnace AA analytes. Instrument software calculates spike recoveries based on absolute values below the IDL for sample results. This is hard-coded by the vendor and is currently not correctable. CLP convention (SOW ILM02.0, Exhibit E, Section V, Item 6, page E-20) requires that when values fall below the IDL, the sample result is equal to zero (0) for the purposes of calculating the percent recovery. The Form XIVs contain the correct calculation.

Margaret M. Beatyre
J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

11/3/92
Date

mlj\clp-met.nar

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/30/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-0000-00

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	BO6PP3	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
		Calcium, Total	39000		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	10.0	u	UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	573		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	6410		UG/L	5000
		Magnesium, Total	12800		UG/L	5000
		Manganese, Total	15.3		UG/L	15.0
		Sodium, Total	22700		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
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	20.3		UG/L	20.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/30/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-0000-00

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	BO6PP4	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
		Calcium, Soluble	41400		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	19.1		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	6810		UG/L	5000
		Magnesium, Soluble	13500		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	23700		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
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/30/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-0000-00

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	BO6PT8	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	3370		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
		Calcium, Total	54100		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	38.1		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	17500		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	20500		UG/L	5000
		Manganese, Total	412		UG/L	15.0
		Sodium, Total	12600		UG/L	5000
		Nickel, Total	40.0	u	UG/L	40.0
		Lead, Total	8.2		UG/L	3.0
		Antimony, Total	60.0	u	UG/L	60.0
		Selenium, Total	5.0	u	UG/L	5.0
		Thallium, Total	100	u	UG/L	100
		Vanadium, Total	57.3		UG/L	50.0
		Zinc, Total	22.2		UG/L	20.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/30/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-0000-00

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	B06PT9	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
		Calcium, Soluble	54300		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	10.0	u	UG/L	10.0
		Copper, Soluble	25.0	u	UG/L	25.0
		Iron, Soluble	100	u	UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	5000	u	UG/L	5000
		Magnesium, Soluble	20100		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	12200		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
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/30/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-0000-00

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-007	B06Q05	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	2380		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
		Calcium, Total	32600		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	10.0	u	UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	9810		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	9710		UG/L	5000
		Magnesium, Total	8910		UG/L	5000
		Manganese, Total	132		UG/L	15.0
		Sodium, Total	18400		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
		Thallium, Total	10.0	u	UG/L	10.0
		Vanadium, Total	50.0	u	UG/L	50.0
		Zinc, Total	115		UG/L	20.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/30/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-0000-00

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-008	B06Q06	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
		Calcium, Soluble	28200		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	10200		UG/L	5000
		Magnesium, Soluble	7740		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	19700		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
		Thallium, Soluble	10.0	u	UG/L	10.0
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	20.0	u	UG/L	20.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/30/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-0000-00

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-010	B06Q23	Silver, Total	12.1		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
		Calcium, Total	55800		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	10.0	u	UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	100	u	UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	6140		UG/L	5000
		Magnesium, Total	16100		UG/L	5000
		Manganese, Total	15.0	u	UG/L	15.0
		Sodium, Total	28400		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
		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.

INORGANIC DATA SUMMARY REPORT 10/30/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-0000-00

WESTON BATCH #: 9208L583

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-011	B06Q24	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
		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	0.20
		Potassium, Soluble	6140		UG/L	5000
		Magnesium, Soluble	16000		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	28100		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
		Thallium, Soluble	100	u	UG/L	100
		Vanadium, Soluble	50.0	u	UG/L	50.0
		Zinc, Soluble	25.9		UG/L	20.0

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PP3

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP583

Matrix (soil/water): WATER Lab Sample ID: 920858301

Level (low/med): LOW Date Received: 8/26/92

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	49.00	U		P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	2.90	B		F
7440-39-3	Barium	55.70	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	39000.00			P
7440-47-3	Chromium	9.00	U		P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	8.00	U		P
7439-89-6	Iron	573.00			P
7439-92-1	Lead	2.00	U	NW	F
7439-95-4	Magnesium	12800.00			P
7439-96-5	Manganese	15.30			P
7439-97-6	Mercury	.10	U	N	CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	6410.00			P
7782-49-2	Selenium	3.10	B	NW	F
7440-22-4	Silver	10.00	U	*	P
7440-23-5	Sodium	22700.00			P
7440-28-0	Thallium	2.00	U	N	F
7440-62-2	Vanadium	22.40	B		P
7440-66-6	Zinc	20.30			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PP4

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP583

Matrix (soil/water): WATER Lab Sample ID: 920858302

Level (low/med): LOW Date Received: 8/26/92

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	49.00	U		P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	3.10	B		F
7440-39-3	Barium	56.10	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	41400.00			P
7440-47-3	Chromium	19.10			P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	8.00	U		P
7439-89-6	Iron	15.00	U		P
7439-92-1	Lead	2.00	U	NW	F
7439-95-4	Magnesium	13500.00			P
7439-96-5	Manganese	4.00	U		P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	6810.00			P
7782-49-2	Selenium	3.60	B	NW	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	23700.00			P
7440-28-0	Thallium	2.00	U	NW	F
7440-62-2	Vanadium	24.40	B		P
7440-66-6	Zinc	7.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PT8

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP583

Matrix (soil/water): WATER Lab Sample ID: 920858304

Level (low/med): LOW Date Received: 8/26/92

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3370.00			P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	3.70	B		F
7440-39-3	Barium	86.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	54100.00			P
7440-47-3	Chromium	38.10			P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	12.90	B		P
7439-89-6	Iron	17500.00			P
7439-92-1	Lead	8.20		NS	F
7439-95-4	Magnesium	20500.00			P
7439-96-5	Manganese	412.00			P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	4580.00	B		P
7782-49-2	Selenium	2.30	B	NW	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	12600.00			P
7440-28-0	Thallium	20.00	U	NW	F
7440-62-2	Vanadium	57.30			P
7440-66-6	Zinc	22.20			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06PT9

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP583

Matrix (soil/water): WATER Lab Sample ID: 920858305

Level (low/med): LOW Date Received: 8/26/92

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	49.00	U		P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	2.20	B		F
7440-39-3	Barium	39.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	54300.00			P
7440-47-3	Chromium	9.40	B		P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	8.00	U		P
7439-89-6	Iron	28.30	B		P
7439-92-1	Lead	2.00	U	NW	F
7439-95-4	Magnesium	20100.00			P
7439-96-5	Manganese	4.10	B		P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	4320.00	B		P
7782-49-2	Selenium	2.60	B	NW	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	12200.00			P
7440-28-0	Thallium	2.00	U	N	F
7440-62-2	Vanadium	29.80	B		P
7440-66-6	Zinc	7.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06Q05

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP583

Matrix (soil/water): WATER Lab Sample ID: 920858307

Level (low/med): LOW Date Received: 8/26/92

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2380.00			P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	3.70	B		F
7440-39-3	Barium	106.00	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	32600.00			P
7440-47-3	Chromium	9.00	U		P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	8.00	U		P
7439-89-6	Iron	9810.00			P
7439-92-1	Lead	2.00	U	NW	F
7439-95-4	Magnesium	8910.00			P
7439-96-5	Manganese	132.00			P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	9710.00			P
7782-49-2	Selenium	2.00	U	N	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	18400.00			P
7440-28-0	Thallium	2.00	U	NW	F
7440-62-2	Vanadium	33.70	B		P
7440-66-6	Zinc	115.00			P
	Cyanide	20.00	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06Q06

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP583

Matrix (soil/water): WATER Lab Sample ID: 920858308

Level (low/med): LOW Date Received: 8/26/92

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	49.00	U		P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	4.00	B		F
7440-39-3	Barium	57.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	28200.00			P
7440-47-3	Chromium	9.00	U		P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	8.00	U		P
7439-89-6	Iron	16.00	B		P
7439-92-1	Lead	2.00	U	NW	F
7439-95-4	Magnesium	7740.00			P
7439-96-5	Manganese	4.20	B		P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	10200.00			P
7782-49-2	Selenium	2.00	U	NW	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	19700.00			P
7440-28-0	Thallium	2.00	U	NW	F
7440-62-2	Vanadium	27.30	B		P
7440-66-6	Zinc	7.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06Q23

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP583

Matrix (soil/water): WATER Lab Sample ID: 920858310

Level (low/med): LOW Date Received: 8/26/92

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	49.00	U		P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	5.80	B		F
7440-39-3	Barium	55.80	B		P
7440-41-7	Beryllium	1.30	B		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	55800.00			P
7440-47-3	Chromium	9.00	U		P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	8.00	U		P
7439-89-6	Iron	31.10	B		P
7439-92-1	Lead	2.00	U	NW	F
7439-95-4	Magnesium	16100.00			P
7439-96-5	Manganese	4.00	U		P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	6140.00			P
7782-49-2	Selenium	2.40	B	NW	F
7440-22-4	Silver	12.10			P
7440-23-5	Sodium	28400.00			P
7440-28-0	Thallium	2.00	U	NW	F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	17.20	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06Q24

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP583

Matrix (soil/water): WATER Lab Sample ID: 920858311

Level (low/med): LOW Date Received: 8/26/92

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	49.00	U		P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	6.80	B	W	F
7440-39-3	Barium	54.90	B		P
7440-41-7	Beryllium	1.30	B		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	55900.00			P
7440-47-3	Chromium	9.00	U		P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	8.00	U		P
7439-89-6	Iron	16.10	B		P
7439-92-1	Lead	2.00	U	NW	F
7439-95-4	Magnesium	16000.00			P
7439-96-5	Manganese	4.00	U		P
7439-97-6	Mercury	.10	U	N	CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	6140.00			P
7782-49-2	Selenium	2.50	B	NW	F
7440-22-4	Silver	10.00	U	*	P
7440-23-5	Sodium	28100.00			P
7440-28-0	Thallium	20.00	U	N	F
7440-62-2	Vanadium	8.00	U		P
7440-66-6	Zinc	25.90			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: