TO 833

WESTON Analytics Use Only

9209L784

Custody Transfer Record/Lab Work Request

WESTON

Page 1 of 1

Client: Westinghouse Hanford
Est. Final Proj. Sampling Date:
Work Order #: C/168-02-01-9999
Project Contact/Phone #:
AD Project Manager: Jack Edwards
QC: CLP Del: CLP TAT: 3.5 Day
Date Rec'd: 9-4-92 Date Due: 10-9-92
Account #: WS-HAWFORD

Refrigerator #		1	6	6		1	1	Snl7	3		3	1	3				3
#/Type Container	Liquid	Snl7	2AG	1AG		1AG	1AG	V	1P		3P	1	1P				1P
	Solid																
Volume	Liquid	40	950	950		250	250	1L	1L		1L	1	1L				1L
	Solid																
Preservatives		—	—	—		HCl	HCl	HNO3	HNO3		none	1	HCl				HNO3
ANALYSES REQUESTED		ORGANIC							INORG								
		VOA	BNA	Pest/PCB	Herb	TOC	TOX	Gain Sol	Metal	CN	TDS TSS ALK	Anions	NH3N COD				Dis. Metals
		WESTON Analytics Use Only															
		OC04H	OC05H	OC08H		IOCT	ITOX	ISOB	MHSLTOTAL		ITSS ITDS TALK		ICCD INH3N				MHSLSOL

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	OC04H	OC05H	OC08H		IOCT	ITOX	ISOB	MHSLTOTAL		ITSS ITDS TALK		ICCD INH3N				MHSLSOL
001	B06Q50			W	9-2-92		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓				
002	51																					✓
003	52						✓															
004	B06WD6						✓	✓	✓		✓	✓	✓	✓		✓	✓	✓				
005	D7																					✓
006	D8						✓															
007	F5				9-1-92		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓				
008	F6																					✓
009	F7						✓															

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions: Project: 200AAMS
Anions = ICCL, ICFL, ICPO4, ICSO4, ICNO2, ICNO3
DMS/MSD Required
Metals = HSL (1:7)
Radio chem = Gross alpha/Beta, Gammaspec.
original Recruitment

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

RECEIVED FEB 1996 EDMC

WESTON Analytics Use Only

Samples were:
1) Shipped ✓ or Hand Delivered
Airbill # 221 5676-3
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't (Y) or N

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

Anions, NO2, NO3, PO4

Relinquished by	Received by	Date	Time
Emery	Jack Blizzi	9/4/92	15:50
	Oh 9-8-92		

Relinquished by	Received by	Date	Time
	Oh 9-8-92		

RFW 21-21-001/A-7/91 L372 L373 L375 L377 L378 Rel# — Cooler# SnL-171 190 #1 381-596a

START

9209L784-WES-833

00043867

9613427.0930 0000003

Westinghouse Hanford Company	CHAIN OF CUSTODY 9209L784

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 200AAMS

Ice Chest No. 171

Bill of Lading/Airbill No. 252156776-3

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date Sept 2, 1992

Field Logbook No. EFL-1032

Offsite Property No. W92-0-0575-23

Sample Identification

B06050
- 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)

B06051
- 1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B06052
- 3, 40 ml, WATER, CLP-VOA

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

Relinquished by:	Received by:	Date/Time:
[illegible]	K. Trace / K. Trapp	9/3/92 [illegible]
Relinquished by: K. Trace / K. Trapp	Received by:	Date/Time:
Relinquished by: Emery	Received by: [illegible]	Date/Time: 9/4/92 15:50
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

9613427.0931 0000004

Westinghouse Hanford Company	CHAIN OF CUSTODY 9209L784

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 200AAMS

Collection Date Sept 2, 1992

Ice Chest No. SML-190

Field Logbook No. EFL-1032

Bill of Lading/Airbill No. 2 52156776-3

Offsite Property No. W92-0-0575-22

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

Sample Identification

BOG[illegible]

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)

BOG[illegible]

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

BOG[illegible]

3, 40 ml, WATER, CLP-VOA

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

Relinquished by:	Received by:	Date/Time:
[illegible]	K Tropp / K Tropp	9/2/92 0945
K Tropp / K Tropp		
Emery	[illegible]	9/4/92 15:50

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

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

9613427.0932 0000005

Westinghouse Hanford Company	CHAIN OF CUSTODY 9209L784

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Project Designation/Sampling Locations 200AAMS

Ice Chest No. #1

Bill of Lading/Airbill No. 252156776-3

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks N/A

Telephone (509)376-5045

Collection Date Sept 1, 1992

Field Logbook No. EFC-1032

Offsite Property No. W92-0-0575-22

Sample Identification

B0GWF5
- 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)

B0GWFC
- 1, 1L, P, WATER, ICP/AA METAL & Hg (HNO3) (FILTERED)

B0GWF7
- 3, 40 ml, WATER, CLP-VOA

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

Relinquished by:	Received by:	Date/Time:
[illegible]	K Trapp / K Trapp	9/3/92 0941
K Trapp / K Trapp		
Emery	[illegible]	9/4/92 15:50

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

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

9613427.0955 0000006

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector K. D. Lee/L. D. Walker Date Sampled 9/2/92 Time 1150 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
00EQ50	3, 40ml, Gs	W	CLP-VOA
	3, 2L, aG	W	SEMI-VOA, PCB/PEST
	1, 1L, P	W	ICP/AA METAL & Hg, (HNO3) UNFILTERED
	3, 1L, P	W	TDS, ANIONS, TSS, ALK
	1, 1L, P	W	AMMONIA, COD (H2SO4)
	1, 250ml, aG	W	TOC (INCLUDES BICARBONATE/CARBONATE) (H2SO4
	1, 250ml, Gs	W	TOX (H2SO4)
	1, 1L, P	W	GROSS ALPHA/BETA, GAMMA SCAN (HNO3)
00EQ51	1, 1L, P	W	ICP/AA METAL & Hg (HNO3) FILTERED
00EQ52	3, 40ml, Gs	W	CLP-VOA
			Task: 92-128
			ORC: W92-0-0575-23
			COC: 352156776-3

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by _____ Title _____ Date _____

Analysis Required _____

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location

A-6000-406 (05

9613427.0934 0000007

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector K. D. Lee/L. D. Walker Date Sampled 9/2/92 Time 1335 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
600-W06	3, 40ml, Gs	W	CLP-VOA
	3, 2L, aG	W	SEMI-VOA, PCB/PEST
	1, 1L, P	W	ICP/AA METAL & Hg, (HNO3) UNFILTERED
	3, 1L, P	W	TDS, ANIONS, TSS, ALK
	1, 1L, P	W	AMMONIA, COD (H2SO4)
	1, 250ml, aG	W	TOC (INCLUDES BICARBONATE/CARBONATE) (H2SO4
	1, 250ml, Gs	W	TOX (H2SO4)
	1, 1L, P	W	GROSS ALPHA/BETA, GAMMA SCAN (HNO3)
600-W07	1, 1L, P	W	ICP/AA METAL & Hg (HNO3) FILTERED
600-W08	3, 40ml, Gs	W	CLP-VOA
			POL: 252156776-3
			OPC: W02-0-0575-22
			Task: 92-128

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by _____ Title _____ Date _____

Analysis Required _____

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location

A-6000-406 (05

9613427.0935 0000008

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector K. D. Lee/L. D. Walker Date Sampled 9/1/92 Time 0905 hours

Company Contact P. H. Butcher Telephone (509) 376-5045

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
60GW F5	3, 40ml, Gs	W	CLP-VOA
	3, 2L, aG	W	SEMI-VOA, PCB/PEST
	1, 1L, P	W	ICP/AA METAL & Hg, (HNO3) UNFILTERED
	3, 1L, P	W	TDS, ANIONS, TSS, ALK
	1, 1L, P	W	AMMONIA, COD (H2SO4)
	1, 250ml, aG	W	TOC (INCLUDES BICARBONATE/CARBONATE) (H2SO4
	1, 250ml, Gs	W	TOX (H2SO4)
	1, 1L, P	W	GROSS ALPHA/BETA, GAMMA SCAN (HNO3)
60GW F6	1, 1L, P	W	ICP/AA METAL & Hg (HNO3) FILTERED
60GW F7	3, 40ml, Gs	W	CLP-VOA
			Task: 92-129
			ORC: DE92-C-0575-22
			BOC: 252156776-3

Field Information** _____

Special Handling and/or Storage _____

Possible Sample Hazards _____

PART II: LABORATORY SECTION

Received by _____ Title _____ Date _____

Analysis Required _____

*Indicate whether sample is soil, sludge, water, etc.

**Use back of page for additional information relative to sample location.

A-6000-406 (05/

Shipper's Account Number: 502-15-5

WORLDWIDE

Date: 09-03-92 Origin: Shipment Number: 252156776 3

From: SHIPPING DEPT (509) 376-6665
DEPARTMENT OF ENERGY C/O
HANFORD
BLDG 1163
STEVENS DRIVE
LAND WA

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

Tariff Dest. | Gateway

Check to Shipper $

EMERY WORLDWIDE will accept Consignee's check with all risks being assumed by Shipper, including but not limited to non-payment, fraud and misrepresentation.

Customer's Reference Numbers: 92 PB238 W92-0-0575#22 | Zip: 99352 | Consignee's Account Number: E | Zip: 19341

Description	Pos.	L	W	H	Total Pieces	Total Weight
#23, #24 COOLERS ID: SML190 69#, 72#, 171 75#, 2.. 62#	4	27	16	17	4	278

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

Declared Value $

252156776 3

SAMPLE
FLIGHT LIVERY
NATURE SECURITY SERVICE
9/3/92

Zip Ship ☐ For shipments within the 50 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 ☐

International Shipments: Commodity Code | Third Party Account Number mandatory for Third Party Billing | Third Party Account Number: E

International Customs Value | International Insurance

Total Transportation Charges | Other Charges/Advance at Origin: OCIAO- $

3PHL A

Terms and Conditions on Back

EMERY WORLDWIDE — A CF Company

9209L784
9209L785

GNATURE AND TALLY RECORD

-46 (8/89) Litho USA

DATE: 09-03-92 SHIPMENT NO.: 252156776 3
SHIPPER: WESTINGHOUSE SHIPPING DEPT (509) 376-6665
REFERENCE NO.: W92-0-0575#22, #23, #24

PPER NAME AND ADDRESS
ESTINGHOUSE SHIPPING DEPT (509) 376-6665
2-06 U.S. DEPARTMENT OF ENERGY C/O
ESTINGHOUSE HANFORD COMPANY
355 STEVENS DRIVE 1163 BUILDING
O BOX 1970
ICHLA'D WA 99352

CONSIGNEE NAME AND ADDRESS
JOSIE KING
RF WESTON INC
208 WELSH POOL ROAD
LIONVILLE PA 19341

ces	Weight	Description/Marks	Emery Authorization No.
	278 LBS	WATER SAMPLES COOLERS 69#, 72#, 75#, 62#	

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
[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	[illegible]
[illegible]	PHL	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

ECIAL HANDLING INSTRUCTIONS

CONSIGNEE COPY

Roy F. Weston, Inc. - Lionville Laboratory 06168002-001-9999-00 14/14

Volatiles by GC/MS, HSL List

RFW Batch Number: 9209L784 Client: WESTINGHOUSE HANFORD Work Order: ~~6168-02-0~~ Report Date: 10/13/92 15:05 Page: 1a

	Cust ID:	B06Q50		B06Q50		B06Q52		B06Q52		B06Q52		B06WD6	
Sample Information	RFW#:	001		001 DL		003		003 MS		003 MSD		004	
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	D.F.:	1.00		10.0		1.00		1.00		1.00		1.00	
	Units:	UG/L		UG/L		UG/L		UG/L		UG/L		UG/L	
	Toluene-d8	108	%	99	%	108	%	102	%	101	%	108	%
Surrogate	Bromofluorobenzene	100	%	96	%	103	%	99	%	100	%	102	%
Recovery	1,2-Dichloroethane-d4	107	%	82	%	108	%	106	%	111	%	112	%
			fl		fl		fl		fl		fl		fl
Chloromethane		10	U	NA		10	U	10	U	10	U	10	U
Bromomethane		10	U	NA		10	U	10	U	10	U	10	U
Vinyl Chloride		10	U	NA		10	U	10	U	10	U	10	U
Chloroethane		10	U	NA		10	U	10	U	10	U	10	U
Methylene Chloride		10	U	NA		10	U	10	U	10	U	2	J
Acetone		2	J	NA		10	U	10	U	10	U	3	J
Carbon Disulfide		10	U	NA		10	U	10	U	10	U	10	U
1,1-Dichloroethene		10	U	NA		10	U	123	%	127	%	10	U
1,1-Dichloroethane		10	U	NA		10	U	10	U	10	U	10	U
1,2-Dichloroethene (total)		10	U	NA		10	U	10	U	10	U	10	U
Chloroform		16		NA		2	J	2	J	2	J	10	U
1,2-Dichloroethane		10	U	NA		10	U	10	U	10	U	10	U
2-Butanone		10	U	NA		10	U	10	U	10	U	10	U
1,1,1-Trichloroethane		10	U	NA		10	U	10	U	10	U	10	U
Carbon Tetrachloride			E	1900		10	U	10	U	10	U	3	J
Bromodichloromethane		10	U	NA		10	U	10	U	10	U	10	U
1,2-Dichloropropane		10	U	NA		10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene		10	U	NA		10	U	10	U	10	U	10	U
Trichloroethene		12		NA		10	U	105	%	110	%	10	U
Dibromochloromethane		10	U	NA		10	U	10	U	10	U	10	U
1,1,2-Trichloroethane		10	U	NA		10	U	10	U	10	U	10	U
Benzene		10	U	NA		10	U	122	%	124	%	10	U
trans-1,3-Dichloropropene		10	U	NA		10	U	10	U	10	U	10	U
Bromoform		10	U	NA		10	U	10	U	10	U	10	U
4-Methyl-2-pentanone		10	U	NA		10	U	10	U	10	U	10	U
2-Hexanone		10	U	NA		10	U	10	U	10	U	10	U
Tetrachloroethene		10	U	NA		10	U	10	U	2	J	10	U
1,1,2,2-Tetrachloroethane		10	U	NA		10	U	10	U	10	U	10	U
Toluene		10	U	NA		10	U	115	%	113	%	10	U

*= Outside of EPA CLP QC limits.

000011

RFW Batch Number: 9209L784 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-0 Page: 1b

Cust ID:	B06Q50	B06Q50	B06Q52	B06Q52	B06Q52	B06WD6
RFW#:	001	001 DL	003	003 MS	003 MSD	004
Chlorobenzene	10 U	NA	10 U	112 %	112 %	10 U
Ethylbenzene	10 U	NA	10 U	10 U	10 U	10 U
Styrene	10 U	NA	10 U	10 U	10 U	10 U
Xylene (total)	10 U	NA	10 U	10 U	2 J	10 U

*= Outside of EPA CLP QC limits.

9643477.0968 0000012

Roy F. Weston, Inc. - Lionville Laboratory 06168-002-001-9999-00 10/15/9.
Volatiles by GC/MS, HSL List
Report Date: 10/13/92 15:05

RFW Batch Number: 9209L784 Client: WESTINGHOUSE HANFORD Work Order: ~~6168-02-0~~ Page: 2a

	Cust ID:	B06WD8	B06WF5	B06WF7	VBLK	VBLK
Sample Information	RFW#:	006	007	009	92LVQ120-MB1	92LVQ121-MB1
	Matrix:	WATER	WATER	WATER	WATER	WATER
	D.F.:	1.00	1.00	1.00	1.00	1.00
	Units:	UG/L	UG/L	UG/L	UG/L	UG/L

	Toluene-d8	107	%	109	%	101	%	109	%	98	%	
Surrogate	Bromofluorobenzene	97	%	105	%	92	%	110	%	95	%	
Recovery	1,2-Dichloroethane-d4	110	%	114	%	95	%	113	%	85	%	
Chloromethane		10	U	10	U	10	U	10	U	10	U	
Bromomethane		10	U	10	U	10	U	10	U	10	U	
Vinyl Chloride		10	U	10	U	10	U	10	U	10	U	
Chloroethane		10	U	10	U	10	U	10	U	10	U	
Methylene Chloride		10	U	10	U	10	U	10	U	10	U	
Acetone		10	U	10	U	10	U	10	U	1	J	
Carbon Disulfide		10	U	10	U	10	U	10	U	10	U	
1,1-Dichloroethene		10	U	10	U	10	U	10	U	10	U	
1,1-Dichloroethane		10	U	10	U	10	U	10	U	10	U	
1,2-Dichloroethene (total)		10	U	10	U	10	U	10	U	10	U	
Chloroform		2	J	10	U	2	J	10	U	10	U	
1,2-Dichloroethane		10	U	10	U	10	U	10	U	10	U	
2-Butanone		10	U	10	U	10	U	10	U	10	U	
1,1,1-Trichloroethane		10	U	10	U	10	U	10	U	10	U	
Carbon Tetrachloride		10	U	10	U	10	U	10	U	10	U	
Bromodichloromethane		10	U	10	U	10	U	10	U	10	U	
1,2-Dichloropropane		10	U	10	U	10	U	10	U	10	U	
cis-1,3-Dichloropropene		10	U	10	U	10	U	10	U	10	U	
Trichloroethene		10	U	10	U	10	U	10	U	10	U	
Dibromochloromethane		10	U	10	U	10	U	10	U	10	U	
1,1,2-Trichloroethane		10	U	10	U	10	U	10	U	10	U	
Benzene		10	U	10	U	10	U	10	U	10	U	
trans-1,3-Dichloropropene		10	U	10	U	10	U	10	U	10	U	
Bromoform		10	U	10	U	10	U	10	U	10	U	
4-Methyl-2-pentanone		10	U	10	U	10	U	10	U	10	U	
2-Hexanone		10	U	10	U	10	U	10	U	10	U	
Tetrachloroethene		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	
Toluene		10	U	10	U	10	U	10	U	10	U	

*= Outside of EPA CLP QC limits.

000013
9613127.0949

Cust ID:	B06WD8		B06WF5		B06WF7		VBLK		VBLK	
RFW#:	006		007		009		92LVQ120-MB1		92LVQ121-MB1	
Chlorobenzene	10	U	10	U	10	U	10	U	10	U
Ethylbenzene	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U
Xylene (total)	10	U	10	U	10	U	10	U	10	U

*= Outside of EPA CLP QC limits.

0000014

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLE(S) RECEIVED:** 09-04-92
RFW #: 9209L784, GC/MS VOLATILE
W.O. #: 06168-002-001-9999-00

NARRATIVE

The set of samples consisted of six (6) water samples collected on 09-01,02-92.

The samples were analyzed according to criteria set forth in CLP SOW 03/90 for TCL Volatile target compounds on 09-10,11-92.

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 B06Q50 required a ten-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 blank 92LVQ121-MB1 contained the common contaminant Acetone at a level less than the CRQL.

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

Margaret M. Beaty for 10/16/92
J. Peter Hershey, Ph.D. Date
Laboratory Manager
Lionville Analytical Laboratory

sma/voa/09-784v.cn

WESTON

ADDENDUM

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Margaret M. Beaty Name: MARGARET M. BEATY

Date: 10/16/92 Title: Section Manager

pas\4-92\addendum

9614927.0945

1A VOLATILE ORGANICS ANALYSIS DATA SHEET 00 0 0 3 0 10/15/92

CLIENT SAMPLE NO.

B06Q50

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-001

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

Lab File ID: 0091008

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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	10	U
67-64-1	Acetone	2	J
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	16	
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		E
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	12	
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

9615427.0944 0000031

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

10/15/92

CLIENT SAMPLE NO.

B06Q50

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-001

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

Lab File ID: Q091008

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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.				

9613427.0945

1A VOLATILE ORGANICS ANALYSIS DATA SHEET 000038 CLIENT SAMPLE NO.

10/15/92

B06Q50DL

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-001 DL

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

Lab File ID: 0091107

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/11/92

GC Column: SP1000 ID: 2.00(mm)

Dilution Factor: 10.0

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	NA	
74-83-9	Bromomethane	NA	
75-01-4	Vinyl Chloride	NA	
75-00-3	Chloroethane	NA	
75-09-2	Methylene Chloride	NA	
67-64-1	Acetone	NA	
75-15-0	Carbon Disulfide	NA	
75-35-4	1,1-Dichloroethene	NA	
75-34-3	1,1-Dichloroethane	NA	
540-59-0	1,2-Dichloroethene (total)	NA	
67-66-3	Chloroform	NA	
107-06-2	1,2-Dichloroethane	NA	
78-93-3	2-Butanone	NA	
71-55-6	1,1,1-Trichloroethane	NA	
56-23-5	Carbon Tetrachloride	1900	
75-27-4	Bromodichloromethane	NA	
78-87-5	1,2-Dichloropropane	NA	
10061-01-5	cis-1,3-Dichloropropene	NA	
79-01-6	Trichloroethene	NA	
124-48-1	Dibromochloromethane	NA	
79-00-5	1,1,2-Trichloroethane	NA	
71-43-2	Benzene	NA	
10061-02-6	trans-1,3-Dichloropropene	NA	
75-25-2	Bromoform	NA	
108-10-1	4-Methyl-2-pentanone	NA	
591-78-6	2-Hexanone	NA	
127-18-4	Tetrachloroethene	NA	
79-34-5	1,1,2,2-Tetrachloroethane	NA	
108-88-3	Toluene	NA	
108-90-7	Chlorobenzene	NA	
100-41-4	Ethylbenzene	NA	
100-42-5	Styrene	NA	
1330-20-7	Xylene (total)	NA	

96 1427 0946

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

0 0 0 0 4 3

10/15/92

CLIENT SAMPLE NO.

B06Q52

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-003

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

Lab File ID: Q091009

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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	10	U
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

9612427.0947

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000044

10/15/92

CLIENT SAMPLE NO.

B06Q52

Lab Name: Roy F. Weston, Inc. Work Order: ~~G168-02-01-9999~~ 06168-002.001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-003

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

Lab File ID: 0091009

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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.				

9613427.0948 1A 000049

VOLATILE ORGANICS ANALYSIS DATA SHEET

10/15/92

CLIENT SAMPLE NO.

B06WD6

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-004

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

Lab File ID: 0091010

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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	2	J
67-64-1	Acetone	3	J
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	3	J
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

9613427.0949 0000050

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

10/15/92

CLIENT SAMPLE NO.

B06WD6

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ OX6168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-004

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

Lab File ID: 0091010

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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.				

9613427.0950

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

0000057

10/15/92

CLIENT SAMPLE NO.

B06WD8

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-006

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

Lab File ID: 0091011

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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	10	U
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

96NER27.0951 0 0 0 0 5 8 10/15/92

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B06WD8

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-006

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

Lab File ID: 0091011

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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.				

9613427.0952

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

000063

10/15/92

CLIENT SAMPLE NO.

B06WF5

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-007

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

Lab File ID: 0091012

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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	10	U
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

9612127.0953

IE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

A00064

10/15/92

CLIENT SAMPLE NO.

B06WF5

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-007

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

Lab File ID: 0091012

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/10/92

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.				

96KM427.0994

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

000068

10/15/92

CLIENT SAMPLE NO.

B06WF7

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-009

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

Lab File ID: 0091106

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/11/92

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	10	U
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

9613427.0955

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

000069

10/15/92

CLIENT SAMPLE NO.

B06WF7

Lab Name: Roy F. Weston, Inc. Work Order: ~~6168-02-01-9999~~ 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-009

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

Lab File ID: 0091106

Level: (low/med) LOW

Date Received: 09/04/92

% Moisture: not dec.

Date Analyzed: 09/11/92

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: 10/13/92 08:41

RFW Batch Number: 9209L784 Client: WESTINGHOUSE HANFORD Work Order: 06168-002-001-9 Page: 1a

	Cust ID:	B06Q50		B06Q50		B06Q50		B06WD6		B06WD6		B06WF5	
Sample Information	RFW#:	001		001 MS		001 MSD		004		004 RE		007	
	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	51	%	54	%	61	%	66	%	58	%	64	%
	2-Fluorobiphenyl	66	%	69	%	80	%	76	%	81	%	63	%
	Terphenyl-d14	135	%	118	%	133	%	140	%	140	%	99	%
	Phenol-d5	61	%	60	%	67	%	56	%	48	%	60	%
	2-Fluorophenol	53	%	54	%	59	%	52	%	51	%	53	%
	2,4,6-Tribromophenol	75	%	87	%	96	%	59	%	62	%	55	%
	2-Chlorophenol-d4	64	%	66	%	73	%	57	%	63	%	56	%
	1,2-Dichlorobenzene-d4	46	%	46	%	50	%	49	%	53	%	45	%
Phenol		10	U	68	%	71	%	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	68	%	75	%	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	42	%	45	%	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	58	%	70	%	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	44	%	49	%	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	58	%	67	%	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.

9209L784 000011

RFW Batch Number: 9209L784 Client: WESTINGHOUSE HANFORD Work Order: 06168-002-001-9 Page: 1b

Cust ID:	B06Q50		B06Q50		B06Q50		B06WD6		B06WD6		B06WF5	
RFW#:	001		001 MS		001 MSD		004		004 RE		007	
2,4,6-Trichlorophenol	10	U	18	U	18	U	10	U	10	U	10	U
2,4,5-Trichlorophenol	26	U	46	U	46	U	26	U	26	U	26	U
2-Chloronaphthalene	10	U	18	U	18	U	10	U	10	U	10	U
2-Nitroaniline	26	U	46	U	46	U	26	U	26	U	26	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	26	U	46	U	46	U	26	U	26	U	26	U
Acenaphthene	10	U	71	%	83	%	10	U	10	U	10	U
2,4-Dinitrophenol	26	U	46	U	46	U	26	U	26	U	26	U
4-Nitrophenol	26	U	76	%	82 *	%	26	U	26	U	26	U
Dibenzofuran	10	U	18	U	18	U	10	U	10	U	10	U
2,4-Dinitrotoluene	10	U	85	%	92	%	10	U	10	U	10	U
Diethylphthalate	10	U	18	U	18	U	10	U	10	U	10	U
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	26	U	46	U	46	U	26	U	26	U	26	U
4,6-Dinitro-2-methylphenol	26	U	46	U	46	U	26	U	26	U	26	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	26	U	121 *	%	129 *	%	26	U	26	U	26	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	10	U	2	JB	2	JB	0.6	JB	0.7	JB	0.9	JB
Fluoranthene	10	U	18	U	18	U	10	U	10	U	10	U
Pyrene	10	U	112	%	128 *	%	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	10	U	18	U	18	U	10	U	1	JB	1	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.

9613427.0957 000012

Roy F. Weston, Inc. - Lionville Laboratory

Semivolatiles by GC/MS, HSL List

Report Date: 10/13/92 08:41

RFW Batch Number: **9209L784** Client: **WESTINGHOUSE HANFORD** Work Order: **06168-002-001-9** Page: 2a

	Cust ID:	SBLK		SBLK BS	
Sample Information	RFW#:	92LE1545-MB1		92LE1545-MB1	
	Matrix:	WATER		WATER	
	D.F.:	1.00		1.00	
	Units:	ug/L		ug/L	
Surrogate Recovery	Nitrobenzene-d5	57	%	63	%
	2-Fluorobiphenyl	68	%	65	%
	Terphenyl-d14	120	%	131	%
	Phenol-d5	58	%	63	%
	2-Fluorophenol	49	%	59	%
	2,4,6-Tribromophenol	87	%	75	%
	2-Chlorophenol-d4	59	%	53	%
	1,2-Dichlorobenzene-d4	48	%	39	%
Phenol		10	U	64	%
bis(2-Chloroethyl)ether		10	U	10	U
2-Chlorophenol		10	U	53	%
1,3-Dichlorobenzene		10	U	10	U
1,4-Dichlorobenzene		10	U	33 *	%
1,2-Dichlorobenzene		10	U	10	U
2-Methylphenol		10	U	10	U
2,2'-oxybis(2-Chloropropane)		10	U	10	U
4-Methylphenol		10	U	10	U
N-Nitroso-di-n-propylamine		10	U	54	%
Hexachloroethane		10	U	10	U
Nitrobenzene		10	U	10	U
Isophorone		10	U	10	U
2-Nitrophenol		10	U	10	U
2,4-Dimethylphenol		10	U	10	U
bis(2-Chloroethoxy)methane		10	U	10	U
2,4-Dichlorophenol		10	U	10	U
1,2,4-Trichlorobenzene		10	U	38 *	%
Naphthalene		10	U	10	U
4-Chloroaniline		10	U	10	U
Hexachlorobutadiene		10	U	10	U
4-Chloro-3-methylphenol		10	U	76	%
2-Methylnaphthalene		10	U	10	U
Hexachlorocyclopentadiene		10	U	10	U

*= Outside of EPA CLP QC limits.

9214427.0958 000013

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 09-04-92
RFW #: 9209L784, SEMIVOLATILE
W.O. #: 06168-002-001-9999

NARRATIVE

The set of samples consisted of three (3) water samples collected on 09-01,02-92.

The samples were extracted on 09-09-92 and analyzed according to criteria set forth in CLP SOW 03/90 for TCL Semivolatile target compounds on 09-22,23-92.

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. Four (4) of twenty-two (22) matrix spike recoveries were outside EPA QC limits.

4. Three (3) of eleven (11) blank spike recoveries were outside EPA QC limits.

5. The laboratory blank 92LE1545-MB1 contained the common contaminants Di-n-butylphthalate and Bis(2-ethylhexyl)phthalate at levels less than the CRQL.

6. Internal standard areas are outside QC limits for samples B06Q50 and B06WD6. The associated matrix spike and matrix spike duplicate analyses of sample B06Q50 fulfilled its re-analysis requirement. Sample B06WD6 was re-analyzed on 09-22-92 and reported.

Margaret M. Beaty for 10/15/92

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

kls/09-784b.cn

WESTON
MANAGERS DESIGNERS/CONSULTANTS

ADDENDUM

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Margaret M. Beaty Name: MARGARET M. BEATY

Date: 10/15/92 Title: Section MANAGER

pas\4-92\addendum

CLIENT SAMPLE NO.

B06Q50

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-9999

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER Lab Sample ID: 9209L784-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: M092211

Level: (low/med) LOW Date Received: 09/04/92

% Moisture: _____ decanted: (Y/N)__ Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/22/92

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	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	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	26	U
83-32-9	Acenaphthene	10	U

9613427.0962 000035

CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06Q50

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-9999

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER Lab Sample ID: 9209L784-001

Sample wt/vol: 990 (g/mL) ML Lab File ID: M092211

Level: (low/med) LOW Date Received: 09/04/92

% Moisture: _____ decanted: (Y/N)__ Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/22/92

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	26	U
100-02-7	4-Nitrophenol	26	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	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	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	26	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	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

CLIENT SAMPLE NO.

B06Q50

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-9999

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-001

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

Lab File ID: M092211

Level: (low/med) LOW

Date Received: 09/04/92

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

Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/22/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	11.07	2	J

CLIENT SAMPLE NO.

B06WD6

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-9

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER Lab Sample ID: 9209L784-004

Sample wt/vol: 990 (g/mL) ML Lab File ID: M092307

Level: (low/med) LOW Date Received: 09/04/92

% Moisture: _____ decanted: (Y/N)__ Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/23/92

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	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	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	26	U
83-32-9	Acenaphthene	10	U

9613427.0965 ;5A

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06WD6

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-9

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER Lab Sample ID: 9209L784-004

Sample wt/vol: 990 (g/mL) ML Lab File ID: M092307

Level: (low/med) LOW Date Received: 09/04/92

% Moisture: _____ decanted: (Y/N)__ Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/23/92

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	26	U
100-02-7	4-Nitrophenol	26	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	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	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	26	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	0.6	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	10	U
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

CLIENT SAMPLE NO.

B06WD6

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-9999

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-004

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

Lab File ID: M092307

Level: (low/med) LOW

Date Received: 09/04/92

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

Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/23/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.0

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.42	6	J
2.	UNKNOWN	5.97	3	J

9613427.0967 1B 000058

CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06WD6RE

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-9999

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-004 RE

Sample wt/vol: ~~5.00~~ 990 (g/mL) ML

Lab File ID: M092214

Level: (low/med) LOW 10/13/92

Date Received: 09/04/92

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

Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/22/92

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	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	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	26	U
83-32-9	Acenaphthene	10	U

9613427.0968 IC 000059 CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06WD6RE

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-9999

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER Lab Sample ID: 9209L784-004 RE

Sample wt/vol: ~~5.00~~ 990 (g/mL) ML Lab File ID: M092214

Level: (low/med) LOW Date Received: 09/04/92

% Moisture: _____ decanted: (Y/N)__ Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/22/92

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	26	U
100-02-7	4-Nitrophenol	26	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	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	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	26	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	0.7	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	1	JB
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

9614427.0969 IB 0000070 CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06WF5

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-9999

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER Lab Sample ID: 9209L784-007

Sample wt/vol: 990 (g/mL) ML Lab File ID: M092217

Level: (low/med) LOW Date Received: 09/04/92

% Moisture: _____ decanted: (Y/N)__ Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/22/92

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	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	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	26	U
83-32-9	Acenaphthene	10	U

9613427.0970 1C 000071

CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B06WF5

Lab Name: Roy F. Weston, Inc. Work Order: 6168-02-01-9999

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER Lab Sample ID: 9209L784-007

Sample wt/vol: 990 (g/mL) ML Lab File ID: M092217

Level: (low/med) LOW Date Received: 09/04/92

% Moisture: _____ decanted: (Y/N)__ Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL) Date Analyzed: 09/22/92

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	26	U
100-02-7	4-Nitrophenol	26	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	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	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	26	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	0.9	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	1	JB
117-84-0	Di-n-octyl phthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

CLIENT SAMPLE NO.

B06WF5

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-9

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-007

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

Lab File ID: M092217

Level: (low/med) LOW

Date Received: 09/04/92

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

Date Extracted: 09/09/92

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 09/22/92

Injection Volume: 2.0(uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N

pH: 7.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	SILOXANE	12.35	3	J

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

Report Date: 10/29/92 16:19

RFW Batch Number: 9209L784 Client: WESTINGHOUSE HANFORD Work Order: 06168-002-001-9999-00

Sample Information													
Cust ID:	B06Q50		B06Q50		B06WD6		B06WD6		B06WD6		B06WD6		
RFW#:	001		001		004		004		004 MS		004 MS		
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	90	%	80	%	65	%	55 *	%	80	%	75	%	
Surrogate: Decachlorobiphenyl	65	%	65	%	50 *	%	50 *	%	60	%	60	%	
		fl		fl		fl		fl		fl		fl	
Alpha-BHC	0.050	U	NA		0.050	U	NA		0.050	U	NA		
Beta-BHC	0.050	U	NA		0.050	U	NA		0.050	U	NA		
Delta-BHC	0.050	U	NA		0.050	U	NA		0.050	U	NA		
gamma-BHC (Lindane)	0.050	U	NA		0.050	U	NA		94	%	88	%	
Heptachlor	0.050	U	NA		0.050	U	NA		80	%	72	%	
Aldrin	0.37	B	0.050	U	0.24	B	0.050	U	126 *	%	82	%	
Heptachlor epoxide	0.050	U	NA		0.050	U	NA		0.050	U	NA		
Endosulfan I	0.050	U	NA		0.050	U	NA		0.050	U	NA		
Dieldrin	0.10	U	NA		0.10	U	NA		95	%	92	%	
4,4'-DDE	0.10	U	NA		0.10	U	NA		0.10	U	NA		
Endrin	0.10	U	NA		0.10	U	NA		119	%	92	%	
Endosulfan II	0.10	U	NA		0.10	U	NA		0.10	U	NA		
4,4'-DDD	0.10	U	NA		0.10	U	NA		0.10	U	NA		
Endosulfan sulfate	0.10	U	NA		0.10	U	NA		0.10	U	NA		
4,4'-DDT	0.10	U	NA		0.10	U	NA		114	%	109	%	
Methoxychlor	0.50	U	NA		0.50	U	NA		0.50	U	NA		
Endrin ketone	0.10	U	NA		0.10	U	NA		0.10	U	NA		
Endrin aldehyde	0.10	U	NA		0.10	U	NA		0.10	U	NA		
alpha-Chlordane	0.050	U	NA		0.050	U	NA		0.050	U	NA		
gamma-Chlordane	0.050	U	NA		0.050	U	NA		0.050	U	NA		
Toxaphene	5.0	U	NA		5.0	U	NA		5.0	U	NA		
Aroclor-1016	1.0	U	NA		1.0	U	NA		1.0	U	NA		
Aroclor-1221	2.0	U	NA		2.0	U	NA		2.0	U	NA		
Aroclor-1232	1.0	U	NA		1.0	U	NA		1.0	U	NA		
Aroclor-1242	1.0	U	NA		1.0	U	NA		1.0	U	NA		
Aroclor-1248	1.0	U	NA		1.0	U	NA		1.0	U	NA		
Aroclor-1254	1.0	U	NA		1.0	U	NA		1.0	U	NA		
Aroclor-1260	1.0	U	NA		1.0	U	NA		1.0	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

000011
9613427.0972

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

RFW Batch Number: 9209L784 Client: WESTINGHOUSE HANFORD Work Order: 06168-002-001-9999-00 Report Date: 10/29/92 16:19 Page: 2

Cust ID:	B06WD6		B06WD6		B06WF5		B06WF5		PBLK		PBLK	
Sample Information RFW#:	004 MSD		004 MSD		007		007		92LE1542-MB1		92LE1542-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	
			CONFIRM				CONFIRM				CONFIRM	
Surrogate: Tetrachloro-m-xylene	95	%	85	%	80	%	80	%	65	%	55 *	%
Surrogate: Decachlorobiphenyl	65	%	65	%	80	%	80	%	60	%	60	%
		fl		fl		fl		fl		fl		fl
Alpha-BHC	0.050	U	NA		0.050	U	NA		0.050	U	NA	
Beta-BHC	0.050	U	NA		0.050	U	NA		0.050	U	NA	
Delta-BHC	0.050	U	NA		0.030	J	0.050	U	0.050	U	NA	
gamma-BHC (Lindane)	104	%	100	%	0.050	U	NA		0.050	U	NA	
Heptachlor	92	%	90	%	0.050	U	NA		0.050	U	NA	
Aldrin	88	%	94	%	0.14	B	0.050	U	0.15		0.050	U
Heptachlor epoxide	0.050	U	NA		0.050	U	NA		0.050	U	NA	
Endosulfan I	0.050	U	NA		0.050	U	NA		0.050	U	NA	
Dieldrin	107	%	104	%	0.10	U	NA		0.10	U	NA	
4,4'-DDE	0.10	U	NA		0.10	U	NA		0.12		0.10	U
Endrin	123 *	%	96	%	0.10	U	NA		0.10	U	NA	
Endosulfan II	0.10	U	NA		0.10	U	NA		0.10	U	NA	
4,4'-DDD	0.10	U	NA		0.10	U	NA		0.10	U	NA	
Endosulfan sulfate	0.10	U	NA		0.10	U	NA		0.10	U	NA	
4,4'-DDT	119	%	122	%	0.10	U	NA		0.070	J	0.10	U
Methoxychlor	0.50	U	NA		0.50	U	NA		0.50	U	NA	
Endrin ketone	0.10	U	NA		0.10	U	NA		0.10	U	NA	
Endrin aldehyde	0.10	U	NA		0.10	U	NA		0.10	U	NA	
alpha-Chlordane	0.050	U	NA		0.050	U	NA		0.050	U	NA	
gamma-Chlordane	0.050	U	NA		0.050	U	NA		0.050	U	NA	
Toxaphene	5.0	U	NA		5.0	U	NA		5.0	U	NA	
Aroclor-1016	1.0	U	NA		1.0	U	NA		1.0	U	NA	
Aroclor-1221	2.0	U	NA		2.0	U	NA		2.0	U	NA	
Aroclor-1232	1.0	U	NA		1.0	U	NA		1.0	U	NA	
Aroclor-1242	1.0	U	NA		1.0	U	NA		1.0	U	NA	
Aroclor-1248	1.0	U	NA		1.0	U	NA		1.0	U	NA	
Aroclor-1254	1.0	U	NA		1.0	U	NA		1.0	U	NA	
Aroclor-1260	1.0	U	NA		1.0	U	NA		1.0	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

000012

9613427.0974 14A

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

Client: WESTINGHOUSE HANFORD
RFW #: 9209L784

W.O. #: 06168-002-001-0000-00
Date Received: 08-29-92

PESTICIDE/PCB

The set of samples consisted of three (3) water samples collected on 08-27-92.

The samples were extracted on 09-09-92 and analyzed according to criteria set forth in the Contract Laboratory Program 03/90 SOW for Pesticide and PCB target compounds on 10-13,15-92.

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

1. 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. Four (4) of twenty-eight (28) 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
B06WD6	-	55	50	50
92LE1542-MB1	-	55	-	-

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WESTON
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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 (126%) and Endrin (123%) were outside the EPA Q QC limits of 120% and 121% respectively.

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/09-784pp.cn

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WESTON
MANAGERS DESIGNERS/CONSULTANTS

ADDENDUM

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Margaret M. Beaty Name: MARGARET M. BEATY

Date: 11/2/92 Title: Section MANAGER

pas\4-92\addendum

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1D

CLIENT SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

B06Q50

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER — Lab Sample ID: 9209L784-001

Sample wt/vol: 1000 (g/mL) ML — Lab File ID: 10119235.85

% Moisture: decanted: (Y/N)_ — Date Received: 09/04/92

Extraction: (SepF/Cont/Sonc) CONT — Date Extracted: 09/09/92

Concentrated Extract Volume: 10000.00(uL) — Date Analyzed: 10/15/92

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	0.050	U
319-85-7	Beta-BHC	0.050	U
319-86-8	Delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421934	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

DS 10-29-92

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06WD6

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER — Lab Sample ID: 9209L784-004

Sample wt/vol: 1000 (g/mL) ML — Lab File ID: 10119235.50

% Moisture: decanted: (Y/N)_ — Date Received: 09/04/92

Extraction: (SepF/Cont/Sonc) CONT — Date Extracted: 09/09/92

Concentrated Extract Volume: 10000.00(uL) — Date Analyzed: 10/13/92

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	0.050	U
319-85-7	Beta-BHC	0.050	U
319-86-8	Delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421934	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B06WF5

Lab Name: Roy F. Weston, Inc. Work Order: 06168-002-001-9999-00

Client: WESTINGHOUSE HANFORD

Matrix: (soil/water) WATER

Lab Sample ID: 9209L784-007

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

Lab File ID: 10119235.84

% Moisture: decanted: (Y/N)

Date Received: 09/04/92

Extraction: (SepF/Cont/Sonc) CONT

Date Extracted: 09/09/92

Concentrated Extract Volume: 10000.00 (uL)

Date Analyzed: 10/15/92

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	0.050	U
319-85-7	Beta-BHC	0.050	U
319-86-8	Delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421934	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

DS 10-24-92

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ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLE(S) RECEIVED:** 09-04-92
RFW #: 9209L784
W.O. #: 6168-02-01-9999

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 Total Organic Halides (analyzed past hold) and Nitrate by IC, Nitrite 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% guidance limits (70-130% for Total Organic Halides).

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 10/8/92
J. Peter Hershey, Ph.D. Date
Laboratory Manager
Lionville Analytical Laboratory

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ADDENDUM

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Margaret M. Beaty Name: MARGARET M. BEATY

Date: 10/8/92 Title: Section MANAGER

pas\4-92\addendum

9613427.0982

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-9999

WESTON BATCH #: 9209L784

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	B06Q50	Alkalinity	135	MG/L	2.0
		Chloride by IC	37.9	MG/L	5.0
		Fluoride by IC	10.0 u	MG/L	10.0
		Nitrite by IC	0.25 u	MG/L	0.25
		Nitrate by IC	1260	MG/L	50.0
		Chemical Oxygen Demand	5.0 u	MG/L	5.0
		Phosphate by IC	0.25 u	MG/L	0.25
		Sulfate by IC	65.5	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	4.2	MG/L	0.50
		Total Dissolved Solids	2630	MG/L	5.0
		Total Organic Halides	1390	UG/L	20.0
		Total Suspended Solids	14.0	MG/L	5.0
-004	B06WD6	Alkalinity	135	MG/L	2.0
		Chloride by IC	4.6	MG/L	0.25
		Fluoride by IC	0.55	MG/L	0.50
		Nitrite by IC	0.25 u	MG/L	0.25
		Nitrate by IC	2.3	MG/L	0.25
		Chemical Oxygen Demand	5.0 u	MG/L	5.0
		Phosphate by IC	0.25 u	MG/L	0.25
		Sulfate by IC	16.9	MG/L	5.0
		Ammonia, as N	0.10 u	MG/L	0.10
		Total Organic Carbon	3.4	MG/L	0.50
		Total Dissolved Solids	203	MG/L	5.0
		Total Organic Halides	5.0 u	UG/L	5.0
		Total Suspended Solids	18.0	MG/L	5.0

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ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/02/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 6168-02-01-9999

WESTON BATCH #: 9209L784

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-007	B06WF5	Alkalinity	135	MG/L	2.0
		Chloride by IC	9.3	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	24.1	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	24.1	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	280	MG/L	5.0
		Total Organic Halides	5.0 u	UG/L	5.0
		Total Suspended Solids	24.0	MG/L	5.0

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

Client: WESTINGHOUSE HANFORD
RFW# : 9209L784

W.O. #: 6168-02-01
Date Received: 09-04-92

CLP METALS

The set of samples consisted of six (6) water samples collected on 09-01 and 09-02-92.

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. Solubles and totals were digested within the same digestion batch; therefore, will share the same QC flags.

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

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

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

5. All preparation blank values were within control limits.

6. All LCS results were within the 80-120% control limits.

7. All matrix spike recoveries were within the 75-125% control limits with the exception of lead. All exceptions are flagged with a "N" on the CLP forms.

8. All duplicate analyses were within the 20% RPD control limit.

9. 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.

WESTON
MANAGERS DESIGNERS/CONSULTANTS

10. 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).

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

12. 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. Zaty for
J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

11/6/92
Date

mlj/clp-met.nar

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

Client: WESTINGHOUSE HANFORD
RFW #: 9209L784

W.O. #: 6168-02-01
Date Received: 09-04-92

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. Leaty for

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

11/6/92
Date

mlj\clp-met.nar

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 11/05/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-9999-00

WESTON BATCH #: 9209L784

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	B06Q50	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	284		UG/L	200
		Beryllium, Total	5.0	u	UG/L	5.0
		Calcium, Total	258000		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	264		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	752		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	9780		UG/L	5000
		Magnesium, Total	79000		UG/L	5000
		Manganese, Total	16.6		UG/L	15.0
		Sodium, Total	146000		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	50.0	u	UG/L	50.0
		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

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ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 11/05/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-9999-00

WESTON BATCH #: 9209L784

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	B06Q51	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	282		UG/L	200
		Beryllium, Soluble	5.0	u	UG/L	5.0
		Calcium, Soluble	258000		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	263		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	9650		UG/L	5000
		Magnesium, Soluble	78800		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	146000		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	50.0	u	UG/L	50.0
		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 11/05/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-9999-00

WESTON BATCH #: 9209L784

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	B06WD6	Silver, Total	10.0	u	UG/L	10.0
		Aluminum, Total	378		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	23600		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	3350		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	7860		UG/L	5000
		Manganese, Total	221		UG/L	15.0
		Sodium, Total	16900		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	45.0		UG/L	20.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 11/05/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-9999-00

WESTON BATCH #: 9209L784

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	B06WD7	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	23200		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	678		UG/L	100
		Mercury, Soluble	0.20	u	UG/L	0.20
		Potassium, Soluble	5000	u	UG/L	5000
		Magnesium, Soluble	7670		UG/L	5000
		Manganese, Soluble	55.9		UG/L	15.0
		Sodium, Soluble	16700		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	34.2		UG/L	20.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 11/05/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-9999-00

WESTON BATCH #: 9209L784

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-007	B06WF5	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	37000		UG/L	5000
		Cadmium, Total	5.0	u	UG/L	5.0
		Cobalt, Total	50.0	u	UG/L	50.0
		Chromium, Total	372		UG/L	10.0
		Copper, Total	25.0	u	UG/L	25.0
		Iron, Total	1530		UG/L	100
		Mercury, Total	0.20	u	UG/L	0.20
		Potassium, Total	5000	u	UG/L	5000
		Magnesium, Total	11700		UG/L	5000
		Manganese, Total	31.4		UG/L	15.0
		Sodium, Total	24600		UG/L	5000
		Nickel, Total	48.7		UG/L	40.0
		Lead, Total	6.4		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 11/05/92

CLIENT: WESTINGHOUSE HANFORD
WORK ORDER: 06168-002-001-9999-00

WESTON BATCH #: 9209L784

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-008	B06WF6	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	36500		UG/L	5000
		Cadmium, Soluble	5.0	u	UG/L	5.0
		Cobalt, Soluble	50.0	u	UG/L	50.0
		Chromium, Soluble	254		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	5610		UG/L	5000
		Magnesium, Soluble	11600		UG/L	5000
		Manganese, Soluble	15.0	u	UG/L	15.0
		Sodium, Soluble	24700		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

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06Q50

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP784

Matrix (soil/water): WATER Lab Sample ID: 920978401

Level (low/med): LOW Date Received: 9/04/92

% 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	2.00	U		F
7440-39-3	Barium	284.00			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	258000.00			P
7440-47-3	Chromium	264.00			P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	8.00	U		P
7439-89-6	Iron	752.00			P
7439-92-1	Lead	2.00	U	NW	F
7439-95-4	Magnesium	79000.00			P
7439-96-5	Manganese	16.60			P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	9780.00			P
7782-49-2	Selenium	20.00	U	W	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	146000.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	42.60	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:

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EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

B06Q51

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP784

Matrix (soil/water): WATER Lab Sample ID: 920978402

Level (low/med): LOW Date Received: 9/04/92

% 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	2.00	U		F
7440-39-3	Barium	282.00			P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	258000.00			P
7440-47-3	Chromium	263.00			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	78800.00			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	9650.00			P
7782-49-2	Selenium	20.00	U	W	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	146000.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	38.80	B		P
7440-66-6	Zinc	18.20	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.

B06WD6

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP784

Matrix (soil/water): WATER Lab Sample ID: 920978404

Level (low/med): LOW Date Received: 9/04/92

% 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	378.00			P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	3.40	B		F
7440-39-3	Barium	45.70	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	23600.00			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	3350.00			P
7439-92-1	Lead	2.50	B	NW	F
7439-95-4	Magnesium	7860.00			P
7439-96-5	Manganese	221.00			P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	3680.00	B		P
7782-49-2	Selenium	2.00	U	W	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	16900.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	21.20	B		P
7440-66-6	Zinc	45.00			P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B06WD7

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP784

Matrix (soil/water): WATER Lab Sample ID: 920978405

Level (low/med): LOW Date Received: 9/04/92

% 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	93.20	B		P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	3.40	B		F
7440-39-3	Barium	33.20	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	23200.00			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	678.00			P
7439-92-1	Lead	2.00	U	NW	F
7439-95-4	Magnesium	7670.00			P
7439-96-5	Manganese	55.90			P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	20.00	U		P
7440-09-7	Potassium	3460.00	B		P
7782-49-2	Selenium	2.00	U	W	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	16700.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	18.30	B		P
7440-66-6	Zinc	34.20			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.

B06WF5

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP784

Matrix (soil/water): WATER Lab Sample ID: 920978407

Level (low/med): LOW Date Received: 9/04/92

% 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	141.00	B		P
7440-36-0	Antimony	60.00	U		P
7440-38-2	Arsenic	2.30	B		F
7440-39-3	Barium	35.40	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	37000.00			P
7440-47-3	Chromium	372.00			P
7440-48-4	Cobalt	9.00	U		P
7440-50-8	Copper	8.00	U		P
7439-89-6	Iron	1530.00			P
7439-92-1	Lead	6.40		NW	F
7439-95-4	Magnesium	11700.00			P
7439-96-5	Manganese	31.40			P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	48.70			P
7440-09-7	Potassium	4910.00	B		P
7782-49-2	Selenium	2.00	U	W	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	24600.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	30.70	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.

B06WF6

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP784

Matrix (soil/water): WATER Lab Sample ID: 920978408

Level (low/med): LOW Date Received: 9/04/92

% 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	2.50	B		F
7440-39-3	Barium	33.90	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	7.00	U		P
7440-70-2	Calcium	36500.00			P
7440-47-3	Chromium	254.00			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	11600.00			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	5610.00			P
7782-49-2	Selenium	2.00	U	W	F
7440-22-4	Silver	10.00	U		P
7440-23-5	Sodium	24700.00			P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	30.10	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: