9201L074-WES-309

0044093

START 96134411-1121

RECORD OF DISPOSITION

ROD-92-00031

DATE: 1/17/92

LABORATORY: WESTON

100-DR-1

SAMPLE IDENTIFICATION NUMBERS

#Project Wide

DISPOSITION OF SAMPLES

☐ CANCELLED (REASON)

☐ DAMAGED SAMPLE CONTAINER. ANALYSIS CANCELLED

☐ BROKEN GLASS CONTAMINATING SAMPLE. ANALYSIS CANCELLED

☒ OTHER SEE ATTACHED DSI.

FEB 1996 RECEIVED

APPROVED David L. Edwards 1/17/92
PROJECT COORDINATOR DATE

M. Nakamura 1/23/92
TECHNICAL REPRESENTATIVE DATE

9613441.1122

To: [illegible] at WHC170
cc: Karl N Pool at ~WHC167, C M Chance at ~WHC170, Daniel L Edwards
Subject: Alpha Spec.

---------- Message Contents ----------

Jon,

Weston would like to have you put the radionuclides for the alpha spec analysis on the chain of custody. The alpha spec can be used for several radionuclide determinations. If they are listed on the COC then Weston will know exactly what to perform for alpha spec.

The isotopes on the list that was provided to me for the 100-DR-1 project for alpha spec were:

Uranium-235,230
Plutonium-239/240
Americium-241

Thanks.

Dan Edwards

9613441.1123

DON'T SAY IT -- WRITE IT!

DATE: January 15, 1992

TO: Josie King, Weston Laboratories FROM: Dan Edwards, WHC OSM

cc: Karl Pool
Jeff Lerch
Jeanette Duncan

SUBJECT: 100-DR-1 ANALYSIS, ALPHA SPECTROSCOPY

Alpha Spectroscopy has been requested on samples from the 100-DR-1 Vadose project (OSM project number 91-003).

Alpha spectroscopy is to be performed on all 100-DR-1 Vadose samples that have this analysis indicated on the Sample Analysis Request Form. The isotopes of concern for the alpha spectroscopy are Uranium-235, Uranium-238, Plutonium-239/240, and Americium-241.

The letter written by M. A. Beck (dated October 23, 1991) concerning alpha/beta spectroscopy will not apply for this project.

RECORD OF DISPOSITION

PROJECT 91-93/100-DR-1 | ROD-92-00051

DATE: 2/5/92 | LABORATORY: TMA

SAMPLE IDENTIFICATION NUMBERS

B018T3	B018T8			
B018T4	B018T9			
B018T6	B018T5			
B018T7				

DISPOSITION OF SAMPLES

☐ CANCELLED (REASON) _____

☐ DAMAGED SAMPLE CONTAINER. ANALYSIS CANCELLED

☐ BROKEN GLASS CONTAMINATING SAMPLE. ANALYSIS CANCELLED.

X OTHER ABOVE SAMPLES ALIQUOTS WERE NOT LABELED WITH SPECIFIC ANALYSIS REQUESTED FOR EACH. LAB SORTED FOR CORRECT ALIQUOT WITH ANALYSIS, PROCEED WITH ANALYSIS PER MIKE STANKOVICH.

APPROVED Nancy O Sequin 2-6-92
PROJECT COORDINATOR DATE

TECHNICAL REPRESENTATIVE 2/10/92
DATE

9613441.1124

RECORD OF DISPOSITION ROD-92-00043

DATE: 1/23/92 | LABORATORY: TMA 100-DR-1 91-093

SAMPLE IDENTIFICATION NUMBERS

B018T3	B018T7			
B018T4	B018T8			
B018T5	B018T9			
B018T6				

DISPOSITION OF SAMPLES

☐ CANCELLED (REASON) _____

☐ DAMAGED SAMPLE CONTAINER. ANALYSIS CANCELLED

☐ BROKEN GLASS CONTAMINATING SAMPLE. ANALYSIS CANCELLED

☒ OTHER TOTAL ACTIVITY REPORTS WERE NOT SENT WITH SAMPLES TO TMA. TOTAL ACTIVITY REPORT supplied by Mike Stankovich on 1/22/92.

APPROVED Daniel L. Edwards 1/23/92
PROJECT COORDINATOR DATE

[signature] 1/24/92
TECHNICAL REPRESENTATIVE DATE
MIKE STANKOVICH

9613441.1125

Contractor Westinghouse Hanford Co.	9613441.1126 OFF-SITE PROPERTY CONTROL	CONTROL NUMBER (To be obtained from PROPERTY MANAGEMENT) W92-0-0123-29

PART I – TO BE COMPLETED BY ORIGINATOR

Department Environmental Engineering	Section Technical Baseline	Unit

The following items are to be shipped from ☒ Contractor ☐ Vendor

Routing ☒ Contractor ☐ Vendor

Shipped to TMA / NORCAL
2030 Wright Ave.
Richmond, CA 94804

Off-site Custodian Attn: Robert Fox

Full Title Sample Receipt

Quantity	Description (Include Serial and any Government Tag Numbers)	Original Cost
1 42 lbs.	Poly Ice Chest (RM #43 - Glass jars of soil, packed in vermiculite and blue ice. - Sample # B018T5, B018T3, B018T4, B018T6, B018T7, B018T8	

☐ Classified ☒ Unclassified ☐ Shipped Under DOE Contract ☐ Shipped Under Contractor's Use Permit Contract

Necessity for the Off-Site Use of this Property

Program not available on site.
Bill of Lading # 2509865259

CERTIFICATION OF THE RADIATION MONITORING RELEASE MUST BE SECURED THE SAME DAY THAT MATERIAL IS DELIVERED TO SHIPPING.

RM Clearance for Public Release	RM Survey No. 1204/18	Date 1-17-92
Location of Property (Area & Bldg.) 100-DR-1 Sodium Dichromate Tank	Contact C.E. Heiden	Phone 6-2640
Date Ready for Shipment 01/17/92	Cost Code to be Charged PB21C 81223	Approximate Date This Property will be Returned N/A
Originated By C.E. Heiden	Date 01/17/92	Authorized By [signature] Date 1-17-92
Signature and Name of Property Control	Custodian Date	Property Management Approval [signature] Date 1-17-92

PART II – TO BE COMPLETED BY SHIPPING

Signature of Recipient [signature]	Return Order No.	Date Issued	Purchase Order No.	Date Issued
Date 1-17-92				

DISTRIBUTION

By Originator	Shipping Operation – Sign all Copies and Forward to:
White, Green, Yellow, Pink – Property Management Goldenrod – Retain	White – Property Management Yellow – Retain Green – Property Control Custodian (Issuing Office) Pink – Originator

54-3000-479 (09/89)

9613441.1127 Saturday Delivery" "Signature Security"

Contractor Westinghouse Hanford Co.	OFF-SITE PROPERTY CONTROL	CONTROL NUMBER (To be obtained from PROPERTY MANAGEMENT) W92-0-0123-30

PART I – TO BE COMPLETED BY ORIGINATOR

Department Environmental Engineering	Section Technical Baseline	Unit
The following items are to be shipped from	☒ Contractor	☐ Vendor
Routing	☒ Contractor	☐ Vendor

Shipped to	Off-site Custodian
Weston 208 Welsh Pool Road Lionville, PA 19341	Attn: Peg Beaty
	Full Title: Project Coordinator

Quantity	Description (Include Serial and any Government Tag Numbers)	Original Cost
1 93 lbs.	Poly Ice Chest, (RM #105 - Glass jars of soil, packed in vermiculite and blue ice. - Sample # B018T3, B018T4, B018T6, B018T7 B018T8, B018T9, B018T5	

☐ Classified ☒ Unclassified ☐ Shipped Under DOE Contract ☐ Shipped Under Contractor's Use Permit Contract

Necessity for the Off-Site Use of this Property

Program not available on site.

Bill of Lading # 2509866540 2

CERTIFICATION OF THE RADIATION MONITORING RELEASE MUST BE SECURED THE SAME DAY THAT MATERIAL IS DELIVERED TO SHIPPING.

RM Clearance for Public Release	RM Survey No	Date
[signature]	120418	1-17-92
Location of Property (Area & Bldg.) 100-DR-1 Sodium Dichromate Tank	Contact C.E. Heiden	Phone 6-2640
Date Ready for Shipment 01/17/92	Cost Code to be Charged P821C 81223	Approximate Date This Property will be Returned N/A
Originated By C.E. Heiden	Date 01/17/92 Authorized By [signature]	Date 1-17-92
Signature and Name of Property Control	Custodian Date	Property Management Approval [signature] Date 1-17-92

PART II – TO BE COMPLETED BY SHIPPING

Signature of Recipient	Return Order No.	Date Issued	Purchase Order No.	Date Issued
[signature]				
Date 1-17-92				

DISTRIBUTION

By Originator	Shipping Operation – Sign all Copies and Forward to:
White, Green, Yellow, Pink – Property Management Goldenrod – Retain	White – Property Management Yellow – Retain Green – Property Control Custodian (Issuing Office) Pink – Originator

RECORD OF DISPOSITION

PROJECT 91-93/100-DR-1

ROD-92-00052

DATE: 2/5/92

LABORATORY: WESTON

SAMPLE IDENTIFICATION NUMBERS

B018T3	B018T8			
B018T4	B018T9			
B018T6	B018T5			
B018T7				

DISPOSITION OF SAMPLES

☐ CANCELLED (REASON) _____

☐ DAMAGED SAMPLE CONTAINER. ANALYSIS CANCELLED

☐ BROKEN GLASS CONTAMINATING SAMPLE. ANALYSIS CANCELLED.

X OTHER ABOVE SAMPLES ALIQUOTS WERE NOT LABELED WITH SPECIFIC ANALYSIS REQUESTED FOR EACH. LAB SORTED FOR CORRECT ALIQUOT WITH ANALYSIS, PROCEED WITH ANALYSIS PER MIKE STANKOVICH.

APPROVED Nancy O Seguin 2-6-92
PROJECT COORDINATOR DATE

2/10/92
TECHNICAL REPRESENTATIVE DATE

9613444.1128

Westinghouse Hanford Company

Hanford Operations and Engineering Contractor for the US Department of Energy
P.O. Box 1970 Richland, Wa. 99352

NONCONFORMANCE REPORT

Page 1 of 1

NO. B 07704

MFR/ORG: WHC

ITEM/MATERIAL NAME: ENVIR. SAMPLE

PART NO.: N/A

DRAWING/SPEC. NO.: NA

REV.: N/A

PROGRAM/PROJECT: 100-DR-1

P.O./W.O. NO.: 91-093

UNUSUAL OCCURRENCE REPORT REQUIRED: ☐ YES ☒ NO

SYSTEM/END USE: NA

DATE: 1/15/92

DESCRIPTION OF NONCONFORMANCE

- SAMPLE Numbers B018T3, B018T4, B018T5, B018T6, B018T7, B018T8
- HEIS Numbers were duplicated on samples for 100-DR-1. SAMPLES WERE sent with identical numbers to both the TMA and Weston ~~laboratair~~ DLE 1/23/92 laboratories.

3. REQUIREMENT VIOLATED	DOCUMENT	REV	ZONE/PARA
Unique sample number not assigned to sample	WHC-EP-0372 Volume 1 HEIS users manual		

Daniel L. Edwards — ORIGINATOR

12500 ~~28600~~ DLE 1/23/92 — ORGANIZATION

1/23/92 — DATE

ASME CODE ITEM(s): ☒ NO ☐ YES. NOTIFY AUTHORIZED INSPECTOR.

WHC QAR: NA

CAUSE OF NONCONFORMANCE

☐ PROCEDURES ☒ PERSONNEL ☐ MATERIALS
☐ EQUIPMENT ☐ OTHERS

REMARKS:

6. CORRECTIVE ACTION TO ELIMINATE CAUSE

INITIATION DATE: SERIAL NO.:

RESPONSIBLE ORG. REP. TITLE DATE

RECOMMENDED DISPOSITION: ☐ ACCEPT ☐ REJECT ☐ REPAIR ☒ REWORK ☐ OTHER

DISPOSITION JUSTIFICATION AND INSTRUCTIONS

The sample Numbers assigned to the Weston Lab shall remain the same. The numbers assigned to the TMA lab shall be changed as per the WHC Internal Memo # 81260-92-062 (see attached). The samples collected were divided into two separate sample bottles, and sent to two different laboratories. Each separate lab received the correct number of sample bottles and sizes; therefore, traceability was not compromised.

2-IV, PN-003, SW-01

9. ADDITIONAL REVIEWS REQUIRED (WHC ONLY) ☐ YES ☒ NO

IF YES, IDENTIFY:

SUPPLIER ENG.: NA

SUPPLIER QA: NA

DISPOSITION APPROVAL (WHC ONLY)

☒ APPROVED ☐ DISAPPROVED
☐ OTHER (SEE CONTINUATION SHEET)

V. NAIKNIMBALKAR — 5/21/92
COGNIZANT ENGINEER — DATE

G.S. CORRIGAN — 5-21-92
COGNIZANT QA ENGINEER — DATE

NA
AUTHORIZED INSPECTOR REVIEW — DATE

11. ADDITIONAL APPROVALS

NAME	TITLE	DATE	NAME	TITLE	DATE
NA			NA		

DISPOSITION ACTION COMPLETE

NAME — DATE 5-21-92 — QTY. ACCEPT — QTY. REJ.

FOLLOW ON NCR

QA LOG NO.: A-92-008

The issuance and acceptance of this request in no way limits or affects the warranty provisions of the order. This request shall not establish a precedent or obligation to accept similar conditions in the future.

FOLLOW-UP LEVEL: A ☐ B ☐ C ☐

9613441.1130

Westinghouse
Hanford Company

Internal
Memo

From: Environmental Data Management
Phone: 6-8034 H4-52
Date: April 24, 1992
Subject: SAMPLE NUMBER REASSIGNMENT - NCR B07704 (EQA-92-008)

81260-92-062

To: N. M. Naiknimbalkar H4-55

cc: G. S. Corrigan H4-16
R. D. Fox H4-52
M. R. Schwab H4-52
Reference File #SCR 36
RDF File/LB

The NCR addressed the assignment of duplicate sample numbers issued for samples sent to two different analytical laboratories.

The Environmental Data Management (EDM) obtained six new HEIS sample numbers from the Office of Sample Management (OSM) to replace the duplicate numbers inadvertently assigned to the samples sent to the TMA Laboratories.

The new HEIS sample number assignments for the TMA laboratory numbers are:

PREVIOUSLY ASSIGNED	NEWLY ASSIGNED
B018T3	B01WZ3
B018T4	B01WZ4
B018T5	B01WZ5
B018T6	B01WZ6
B018T7	B01WZ7
B018T8	B01WZ8

Copies of the HEIS sample number assignment records are attached for filing with the NCR in the Project Files.

Z. Duane Farris
HEIS Data Coordinator

blu

Attachments 3

WESTON Analytics Use Only

9201L074

Custody Transfer Record/Lab Work Request

WESTON

Page 1 of 3

Client: Westinghouse Hanford
Est. Final Proj. Sampling Date:
Work Order #: 6168-02-01-0000
Project Contact/Phone #:
AD Project Manager: Jack King
QC: Del: TAT: 35 day
Date Rec'd: 1-18-92 Date Due: 2-22-92
Account #: WS-HANFORD

Refrigerator #		1	6	6			SUB	SUB	4	4		4				
#/Type Container	Liquid															
	Solid	16	16				16	16	16	16		16				
Volume	Liquid															
	Solid	120 ml	1,000 ml				1,000	1000	250	250		250				
Preservatives		none	none													
ANALYSES REQUESTED →		ORGANIC							INORG							
		VOA	BNA	Pest/PCB	Herb	Anions	Radiochem	C-14	Metal	CN		TCLP	TCLV			
WESTON Analytics Use Only		6624H	6625H	6608H		See Below	IS4B	IS4B	MHSL-705	2CN/TD		2TCLP	ITCLV			

MATRIX CODES:	Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	VOA	BNA	Pest/PCB	Herb	Anions	Radiochem	C-14	Metal	CN		TCLP	TCLV			
S - Soil	001	B018T3			S	1-15-92		✓	✓	✓		✓	✓	✓	✓	✓		✓	✓			
SE - Sediment	002	B018T4						✓	✓	✓		✓	✓	✓	✓	✓		✓	✓			
SO - Solid	003	B018T6						✓	✓	✓		✓	✓	✓	✓	✓		✓	✓			
SL - Sludge	004	B018T7						✓	✓	✓		✓	✓	✓	✓	✓		✓	✓			
W - Water	005	B018T8						✓	✓	✓		✓	✓	✓	✓	✓		✓	✓			
O - Oil	006	B018T9						✓														
A - Air	007	B018T5																✓	✓			
DS - Drum Solids																						
DL - Drum Liquids																						
L - EP/TCLP Leachate		Anions: ICPO4, ICSO4, ICNO3, ICCL, ICFL																				
WI - Wipe		Perm TCLV 1st																				
X - Other																						
F - Fish																						

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

DATE/REVISIONS: RAD INFO TO FOLLOW

1.
2. leachate (TCLP) for 005 added to 3rd page
3. this was used initially - leachate used
4. completed - bottles were marked
5. incorrectly - this fixed at begin
6. prior to custody transfer

Special Instructions:

Radio Chem = Gross alpha/Beta, Gamma spec, Am-241, Pu-239/240, Sr-90, U-235, U-238/234, Pu-239/240

MS/MSD Required for Each Batch & Each Matrix

#100-D-R-1 Project

Original Recertification from Westinghouse C.O.C. PARSONS - See Page 2

WESTON Analytics Use Only

Samples were:
1) Shipped ✓ or Hand Delivered
Airbill # 2509 8649402
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
Westinghouse only

Discrepancies Between Samples Labels and COC Record? (Y) or N
NOTES: No analysis I.D. on labels or C.O.C.

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
Emery	[illegible]	1-18-92	13:15		[illegible]	1-18-92	
	[illegible]	1-20-92					

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

WESTON Analytics Use Only

9201L074

Custody Transfer Record/Lab Work Request

WESTON

Client: Westinghouse Hanford
Est. Final Proj. Sampling Date:
Work Order #: 6168-02-01
Project Contact/Phone #:
AD Project Manager:
QC: CLP Del: CLP TAT: Rush
Date Rec'd: Date Due:
Account #:

Refrigerator #:
#/Type Container: Liquid / Solid
Volume: Liquid / Solid
Preservatives: Leachate / Leachate

ANALYSES REQUESTED →

ORGANIC				INORG	
VOA	BNA	Pest/PCB	Herb	Metal	CN

WESTON Analytics Use Only: 0624T, 0625T, 0608T, 0448GT, RADSTCW

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	0624T	0625T	0608T	0448GT				RADSTCW						
008	B018T 3 TCLP 1 001			W	1/28/92		✓													
009	4 002						✓													
010	6 003						✓													
011	7 004						✓													
012	8 005						✓													
013	5 007						✓													
014	B018T 3 TCLP 1 001			W	1/28/92			✓	✓	✓				✓						
015	4 002							✓	✓	✓				✓						
016	6 003							✓	✓	✓				✓						
017	7 004							✓	✓	✓				✓						

2A

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:

DATE/REVISIONS:
1/28/92 1. TCLP + TCLV/Radiochemistries reflected on COC
1/30/92 2. Radio chem subbed to Teledyne
3.
4.
5.
6.

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't Y or N

Relinquished by	Received by	Date	Time
	1-20-92		

Relinquished by	Received by	Date	Time
	1-20-92		

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

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

WESTON Analytics Use Only

9201L074

Custody Transfer Record/Lab Work Request

WESTON

Page 3 of 3

Client: Westinghouse Hanford

Est. Final Proj. Sampling Date:

Work Order #:

Project Contact/Phone #: Lee Poyer

AD Project Manager:

QC: CLP Del: CLP TAT:

Date Rec'd: 1-28-92 Date Due:

Account #: 19 [illegible]

Refrigerator #:

#/Type Container: Liquid / Solid

Volume: Liquid / Solid

Preservatives: Leachate

ANALYSES REQUESTED →

ORGANIC				INORG	
VOA	BNA	Pest/PCB	Herb	Metal	CN

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	WESTON Analytics Use Only: 06257	06087	OHB5T	Metal	
018	B018T5 TCLP #007			W	1/27/92		✓	✓	✓	✓	← originally #[illegible] 019
019	B018T8 TCLP #005			W	↓		✓	✓	✓	✓	originally #[illegible] 001

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:

DATE/REVISIONS:

1.
2.
3.
4.
5.
6.

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't Y or N

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

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
	[illegible] 1-30-92				[illegible] 1-30-92		

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

9613441.1134 0005504

Westinghouse Hanford Company	CHAIN OF CUSTODY RFW 9201L074

Custody Form Initiator: C. E. HEIDEN

Company Contact: MIKE STANKOVICH — Telephone: (509) 376-2493

Project Designation/Sampling Locations: 91-93 100-DR-1 — Collection Date: 1-15-92

SODIUM DICHROMATE TANK SOIL SAMPLING

Ice Chest No.: RM #105 — Field Logbook No.: WHC-N-429-1

Bill of Lading/Airbill No.: 2509865402 — Offsite Property No.: W92-0-023-30

Method of Shipment: EMERY

Shipped to: WESTON LIONVILLE, PA

Possible Sample Hazards/Remarks: N/A

Sample Identification

3018T3 — 2-1000 mL
3018T4 — 3-250 mL, 1-120 mL
3018T6 — 1-60 mL
B018T7 — 2-1000 mL, 3-250 mL — SOIL
B018T8 — 1-120 mL, 1-60 mL
B018T9 — 1-120 mL
B018T5 — 1-250 mL — SOIL

Field Transfer of Custody	CHAIN OF POSSESSION	(Sign and Print Names)
Relinquished by: C.E. Heiden C.E. Heiden	Received by:	Date/Time:
Relinquished by: Emery	Received by: [illegible]	Date/Time: 1-18-92 13:15
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90)

9613441.1135 0005005

WESTON RPW92010074

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST

PART I: FIELD SECTION

Collector F.W. Gustafson, C.E. Heiden Date Sampled 01/15/92 Time ____ hours

Company Contact Mike Stankovich Telephone (509) 376-2493

Sample Number	Number and Type of Sample Containers	Type of Sample*	Analysis Requested	Method	
B018T3	2-1000ml 1-120ml 4-250ml 1-60ml	Soil	ICP/AA Metals	6010	
B018T4	↑	↑	AVO Hg	7470	250 ml
B018T6	↕	↕	Cyanide	9010	250 ml
B018T7	↓	↓	VOA	8240	120 ml
B018T8	2-1000ml 1-120ml 4-250ml 1-60ml		Semi-VOA	8270	
B018T9	1-120 ml	Soil	PCB's/Pesticides	8080	1000 ml
B018T5	1-~~120~~ 250 ml C.H. 1/15/92	Soil	Anions (IC)	EPA 300.0	
			Carbon 14	LAB SOP	60 ml
			Strontium-90	LAB SOP	
			U-235	↑	
			U-238/239		
			Pu-239/240		
			Gross Alpha		1000 ml
			Gross Beta		
			Gamma Spec	↓	
			Am-241	LAB SOP	
			TCLP	1311	250 ml
			NOTE: Sample # B018T9 to be analyzed for VOA (Method 8240) only. (1-120 ml)		

Field Information** —

NOTE: Sample # B018T5 to be analyzed for TCLP (Method 1311) only. (1-250 ml)

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.

1-18-92

A-6000-406 (05/90)

FORM OF R

06 1344 0 0 0 5 6

EMERY WORLDWIDE

SERVICES

UNITED STATES / CANADA: Same Day, AM, Second Day, Saturday Delivery

INTERNATIONAL: Express, Priority, Economy

Shipper's # 850R 85

Date 01-17-92 Origin PSC Shipment Number 86

Tariff Date

WESTINGHOUSE SHIPPING DEPT (509) 376-6665
US DEPARTMENT OF ENERGY C/O
WESTINGHOUSE HANFORD
BLDG 1163
99 STEVENS DRIVE
RICHLAND WA

To: PEG BEATY
BR PRESTON INC
208 WELSH POOL ROAD
LONVILLE PA

Customer's Reference Number: 81223 PB81C.W92-0-0123#30

Zip: 99352

E

Consignee's Account Number

Zip: 19341-1313

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

Description: ICE CHEST RM#105 / SOIL SAMPLES 92-0-0123#30

Dimensions: Pcs. 1, L 7, W 16, H 17; Total Pieces 1; Total Weight (in Lbs) 93

Remarks: URDAY DELIVERY NATURE SECURITY SERVICE

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, contained on the area to the right, apply.

Mark if Emery Packaging is used: Upper Letter 8X12; Upper Pack 12X15

Additional Shipments

Commodity Code

Fees Xmcode

Third Party Account Number necessary for Third Party Billing: E

Third Party Account Number

International Customs Value

International Approvals

Charge

Total Transportation Charges

Other Consignee & Shipper Charges

$

Terms and Conditions on Back

2509865402

3-PHL

EMERY WORLDWIDE

SIGNATURE AND TALLY RECORD

DATE: SHIPMENT NO.:

SHIPPER:

REFERENCE NO.:

SHIPPER NAME AND ADDRESS:
WESTINGHOUSE SHIPPING DEPT (509) 376-6665
US DEPARTMENT OF ENERGY C/O
WESTINGHOUSE HANFORD COMPANY
2355 STEVENS DRIVE 1163 BUILDING
PO BOX 1970
RICHLAND WA 99352

15

CONSIGNEE NAME AND ADDRESS:
BR PEG BEATY
WESTON
208 WELSH POOL ROAD
LONVILLE PA 19341

Pieces | Wt/Weight | Description/Marks: 92-0-0123#30 | Emery Authorization No.

ICE CHEST RM#105 SOIL SAMPLES

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.	Dave Demarest	Richland Wa		
2.	Richard Abercrombie	PSC		
3.	Ted Vaux EWW	PSC		
4.	K Rowden	PaCD		
5.	T VanBuren	PDY		
6.	Rich Filiaggi	Lionville PA		1/19/92
7.				
8.				

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

RFW Batch Number: 9201L074 | Client: WESTINGHOUSE HANFORD | Work Order: 6168-02-01-0000 | Report Date: 02/24/92 10:58 | Page: 1a

	Cust ID:	B018T3	B018T3	B018T4	B018T4	B018T4	B018T6
Sample Information	RFW#:	001	001	002	002 MS	002 MSD	003
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	D.F.:	1.00	1.00	1.00	1.00	1.00	1.00
	Units:	ug/Kg	ug/Kg REPREP	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Surrogate Recovery	Toluene-d8	97 %	136 * %	111 %	107 %	102 %	105 %
	Bromofluorobenzene	86 %	121 %	91 %	98 %	86 %	88 %
	1,2-Dichloroethane-d4	83 %	103 %	96 %	96 %	100 %	94 %
		fl	fl	fl	fl	fl	fl
Chloromethane		11 U	11 U	11 U	11 U	11 U	11 U
Bromomethane		11 U	11 U	11 U	11 U	11 U	11 U
Vinyl Chloride		11 U	11 U	11 U	11 U	11 U	11 U
Chloroethane		11 U	11 U	11 U	11 U	11 U	11 U
Methylene Chloride		7 B	20 B	3 J	10 B	11 B	3 J
Acetone		20 B	7 JB	13 B	24 B	36 B	20 B
Carbon Disulfide		6 U	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethene		6 U	6 U	6 U	60 %	60 %	6 U
1,1-Dichloroethane		6 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethene (total)		6 U	6 U	6 U	6 U	6 U	6 U
Chloroform		6 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethane		6 U	6 U	6 U	6 U	6 U	6 U
2-Butanone		11 U	11 U	11 U	11 U	11 U	11 U
1,1,1-Trichloroethane		6 U	6 U	6 U	6 U	6 U	6 U
Carbon Tetrachloride		6 U	6 U	6 U	6 U	6 U	6 U
Vinyl Acetate		11 U	11 U	11 U	11 U	11 U	11 U
Bromodichloromethane		6 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichloropropane		6 U	6 U	6 U	6 U	6 U	6 U
cis-1,3-Dichloropropene		6 U	6 U	6 U	6 U	6 U	6 U
Trichloroethene		6 U	6 U	6 U	98 %	87 %	6 U
Dibromochloromethane		6 U	6 U	6 U	6 U	6 U	6 U
1,1,2-Trichloroethane		6 U	6 U	6 U	6 U	6 U	6 U
Benzene		6 U	6 U	6 U	82 %	76 %	6 U
Trans-1,3-Dichloropropene		6 U	6 U	6 U	6 U	6 U	6 U
Bromoform		6 U	6 U	6 U	6 U	6 U	6 U
4-Methyl-2-pentanone		11 U	11 U	11 U	11 U	11 U	11 U
2-Hexanone		11 U	11 U	11 U	11 U	11 U	11 U
Tetrachloroethene		6 U	6 U	6 U	6 U	6 U	6 U
1,1,2,2-Tetrachloroethane		6 U	6 U	6 U	6 U	6 U	6 U

*= Outside of EPA CLP QC limits.

9613441.1137 000003

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Page: 1b

Cust ID:	B018T3	B018T3	B018T4	B018T4	B018T4	B018T6
RFW#:	001	001 REPREP	002	002 MS	002 MSD	003
Toluene	1 J	6 U	1 J	92 %	86 %	6 U
Chlorobenzene	6 U	6 U	6 U	101 %	92 %	6 U
Ethylbenzene	6 U	6 U	6 U	6 U	6 U	6 U
Styrene	6 U	6 U	6 U	6 U	6 U	6 U
Xylene (total)	6 U	6 U	6 U	6 U	6 U	6 U

*= Outside of EPA CLP QC limits.

9613441.1138 0000059

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

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 02/24/92 10:58 Page: 2a

	Cust ID:	B018T7		B018T8		B018T9		VBLK		VBLK		VBLK	
Sample Information	RFW#:	004		005		006		92LVW011-MB1		92LVW012-MB1		92LVQ015-MB1	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	D.F.:	1.00		1.00		1.00		1.00		1.00		1.00	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	Toluene-d8	103	%	103	%	95	%	98	%	104	%	111	%
	Bromofluorobenzene	96	%	96	%	96	%	101	%	109	%	110	%
	1,2-Dichloroethane-d4	99	%	95	%	87	%	86	%	94	%	97	%
			fl		fl		fl		fl		fl		fl
Chloromethane		10	U	10	U	12	U	10	U	10	U	10	U
Bromomethane		10	U	10	U	12	U	10	U	10	U	10	U
Vinyl Chloride		10	U	10	U	12	U	10	U	10	U	10	U
Chloroethane		10	U	10	U	12	U	10	U	10	U	10	U
Methylene Chloride		2	J	5	U	10	B	3	J	20		5	U
Acetone		16	B	34	B	44	B	5	J	11		6	J
Carbon Disulfide		5	U	5	U	6	U	5	U	5	U	5	U
1,1-Dichloroethene		5	U	5	U	6	U	5	U	5	U	5	U
1,1-Dichloroethane		5	U	5	U	6	U	5	U	5	U	5	U
1,2-Dichloroethene (total)		5	U	5	U	6	U	5	U	5	U	5	U
Chloroform		5	U	5	U	6	U	5	U	5	U	5	U
1,2-Dichloroethane		5	U	5	U	6	U	5	U	5	U	5	U
2-Butanone		10	U	10	U	8	J	10	U	10	U	10	U
1,1,1-Trichloroethane		5	U	5	U	6	U	5	U	5	U	5	U
Carbon Tetrachloride		5	U	5	U	6	U	5	U	5	U	5	U
Vinyl Acetate		10	U	10	U	12	U	10	U	10	U	10	U
Bromodichloromethane		5	U	5	U	6	U	5	U	5	U	5	U
1,2-Dichloropropane		5	U	5	U	6	U	5	U	5	U	5	U
cis-1,3-Dichloropropene		5	U	5	U	6	U	5	U	5	U	5	U
Trichloroethene		5	U	5	U	6	U	5	U	5	U	5	U
Dibromochloromethane		5	U	5	U	6	U	5	U	5	U	5	U
1,1,2-Trichloroethane		5	U	5	U	6	U	5	U	5	U	5	U
Benzene		5	U	5	U	6	U	5	U	5	U	5	U
Trans-1,3-Dichloropropene		5	U	5	U	6	U	5	U	5	U	5	U
Bromoform		5	U	5	U	6	U	5	U	5	U	5	U
4-Methyl-2-pentanone		4	J	6	J	6	J	10	U	10	U	10	U
2-Hexanone		10	U	10	U	12	U	10	U	10	U	10	U
Tetrachloroethene		5	U	5	U	6	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane		5	U	5	U	6	U	5	U	5	U	5	U

*= Outside of EPA CLP QC limits.

9613441.1139 0 0 5 6 1 0

Cust ID:	B018T7	B018T8	B018T9	VBLK	VBLK	VBLK
RFW#:	004	005	006	92LVW011-MB1	92LVW012-MB1	92LVQ015-MB1
Toluene	5 U	5 U	6 U	5 U	5 U	5 U
Chlorobenzene	5 U	5 U	6 U	5 U	5 U	5 U
Ethylbenzene	5 U	5 U	6 U	5 U	5 U	5 U
Styrene	5 U	5 U	6 U	5 U	5 U	5 U
Xylene (total)	5 U	5 U	6 U	5 U	5 U	5 U

*= Outside of EPA CLP QC limits.

9613441.1140 0000017

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE-HANFORD **SAMPLES RECEIVED:** 01-18-92
RFW #: 9201L074, GC/MS VOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of six (6) soil samples collected on 01-15-92.

The samples were analyzed according to criteria set forth in CLP SOW 02/88 (Rev. 05/89) for TCL Volatile target compounds on 01-23,27,28-92.

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. Samples B018T7 and B018T8 were inadvertently analyzed outside the twelve-hour tune time. The samples were not re-analyzed, as per client instructions, because they were outside holding time.

3. One (1) of thirty-six (36) surrogate recoveries was outside EPA QC limits. The associated original analysis of sample B018T3 RE fulfilled its re-analysis requirement.

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

5. The laboratory blanks contained the common contaminant acetone at levels less than 2x CRQL. The laboratory blanks 92LVW011-MB1 and 92LVW012-MB1 also contained the common contaminant methylene chloride at levels less than 5x the CRQL.

6. Internal standard areas were outside QC limits for samples B018T4 and B018T3. The associated matrix spike and spike duplicate analyses of sample B018T4 fulfilled its re-analysis requirement. Sample B018T3 was re-analyzed on 01-28-92 and reported.

03.11.92

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

9613441 9294 6074 -WCS- 309

VOLATILE ORGANICS ANALYSIS SHEET 000027

CLIENT SAMPLE NO.

B018T3

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-001

Sample wt/vol: 5.00 (g/mL) G Lab File ID: W012714

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 7 Date Analyzed: 01/27/92

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

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

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

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B018T3

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-001

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

Lab File ID: W012714

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 7

Date Analyzed: 01/27/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

9613AH 1144 0 0 5 5 0 3 8

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T3RE

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-001

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

Lab File ID: W012805

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 7

Date Analyzed: 01/28/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B018T3RE

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-001

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

Lab File ID: W012805

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 7

Date Analyzed: 01/28/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T4

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-002

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

Lab File ID: 0012311

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 7

Date Analyzed: 01/23/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	13	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B018T4

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-002

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

Lab File ID: 0012311

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 7

Date Analyzed: 01/23/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T6

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-003

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

Lab File ID: Q012312

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 8

Date Analyzed: 01/23/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B018T6

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-003

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

Lab File ID: 0012312

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 8

Date Analyzed: 01/23/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T7

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-004

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

Lab File ID: 0012313

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 0

Date Analyzed: 01/23/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	16	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-pentanone	4	J
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B018T7

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-004

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

Lab File ID: 0012313

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 0

Date Analyzed: 01/23/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T8

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-005

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

Lab File ID: 0012314

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 0

Date Analyzed: 01/23/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

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

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B018T8

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-005

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

Lab File ID: Q012314

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 0

Date Analyzed: 01/23/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T9

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-006

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

Lab File ID: W012717

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 19

Date Analyzed: 01/27/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	10	B
67-64-1	Acetone	44	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	8	J
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-pentanone	6	J
591-78-6	2-Hexanone	12	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Xylene (total)	6	U

VOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B018T9

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-006

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

Lab File ID: W012717

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 19

Date Analyzed: 01/27/92

Column: (pack/cap) PACK

Dilution Factor: 1.00

Number TICs found: 0

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

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

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles by GC/MS, TCLP Leachate

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 02/12/92 14:53 Page: 1a

	Cust ID:	B018T3		B018T3		B018T3		B018T4		B018T6		B018T7	
Sample Information	RFW#:	008		008 MS		008 MSD		009		010		011	
	Matrix:	WATER		WATER		WATER		WATER		WATER		WATER	
	D.F.:	10.0		10.0		10.0		10.0		10.0		10.0	
	Units:	ug/L		ug/L		ug/L		ug/L		ug/L		ug/L	
Surrogate Recovery	Toluene-d8	100	%	96	%	97	%	99	%	100	%	99	%
	Bromofluorobenzene	102	%	97	%	98	%	101	%	99	%	102	%
	1,2-Dichloroethane-d4	101	%	104	%	106	%	101	%	104	%	106	%
			fl		fl		fl		fl		fl		fl
Vinyl Chloride		100	U	98	%	97	%	100	U	100	U	100	U
1,1-Dichloroethene		50	U	113	%	109	%	50	U	50	U	50	U
Chloroform		16	J	116	%	112	%	50	U	19	J	19	J
1,2-Dichloroethane		50	U	122	%	116	%	50	U	50	U	50	U
2-Butanone		100	U	92	%	77	%	100	U	100	U	100	U
Carbon Tetrachloride		50	U	123	%	115	%	50	U	50	U	50	U
Trichloroethene		50	U	107	%	106	%	50	U	50	U	50	U
Benzene		50	U	111	%	107	%	50	U	50	U	50	U
Tetrachloroethene		50	U	113	%	110	%	50	U	50	U	50	U
Chlorobenzene		50	U	111	%	108	%	50	U	50	U	50	U

*= Outside of EPA CLP QC limits.

9613441.1156

Roy F. Weston, Inc. - Lionville Laboratory
Volatiles by GC/MS, TCLP Leachate

Report Date: 02/12/92 14:53

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000

	Cust ID:	B018T8		B018T5		VBLK		LCHBLK	
Sample Information	RFW#:	012		013		92LVK017-MB1		92LTV004-LB1	
	Matrix:	WATER		WATER		WATER		WATER	
	D.F.:	10.0		10.0		1.00		10.0	
	Units:	ug/L		ug/L		ug/L		ug/L	
Surrogate Recovery	Toluene-d8	100	%	101	%	99	%	100	%
	Bromofluorobenzene	102	%	103	%	102	%	105	%
	1,2-Dichloroethane-d4	107	%	106	%	96	%	102	%
Vinyl Chloride		100	U	100	U	10	U	100	U
1,1-Dichloroethene		50	U	50	U	5	U	50	U
Chloroform		13	J	32	J	5	U	18	J
1,2-Dichloroethane		50	U	50	U	5	U	50	U
2-Butanone		100	U	100	U	10	U	100	U
Carbon Tetrachloride		50	U	50	U	5	U	50	U
Trichloroethene		50	U	50	U	5	U	50	U
Benzene		50	U	50	U	5	U	50	U
Tetrachloroethene		50	U	50	U	5	U	50	U
Chlorobenzene		50	U	50	U	5	U	50	U

*= Outside of EPA CLP QC limits.

961344.1157 000610

WESTON

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 01-18-92
RFW #: 9201L074, GC/MS VOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of six (6) leachate samples generated on 01-22-92 from soil samples collected on 01-15-92.

The samples were analyzed according to criteria set forth in CLP SOW 02/88 (Rev. 05/89) for TCLP Volatile target compounds on 01-30-92.

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

1. Samples were analyzed at ten-fold dilutions due to the acidic leachate matrix; however, all TCLP regulatory limits were achieved.

2. All surrogate recoveries were within EPA QC limits.

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

4. The leachate blank 92LTV004-LB1 contained the target compound chloroform at a level less than the CRQL.

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

2.24.92.

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

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

BO18T3

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-008

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

Lab File ID: AK1U10

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____

Date Analyzed: 01/30/92

Column: (pack/cap) CAP

Dilution Factor: 10.0

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

CAS NO.	COMPOUND		
75-01-4	Vinyl Chloride	100	U
75-35-4	1,1-Dichloroethene	50	U
67-66-3	Chloroform	16	J
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	100	U
56-23-5	Carbon Tetrachloride	50	U
79-01-6	Trichloroethene	50	U
71-43-2	Benzene	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T4

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-009

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

Lab File ID: AK1U13

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____

Date Analyzed: 01/30/92

Column: (pack/cap) CAP

Dilution Factor: 10.0

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

CAS NO.	COMPOUND		
75-01-4	Vinyl Chloride	100	U
75-35-4	1,1-Dichloroethene	50	U
67-66-3	Chloroform	50	U
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	100	U
56-23-5	Carbon Tetrachloride	50	U
79-01-6	Trichloroethene	50	U
71-43-2	Benzene	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-010

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

Lab File ID: AK1U14

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____

Date Analyzed: 01/30/92

Column: (pack/cap) CAP

Dilution Factor: 10.0

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

CAS NO.	COMPOUND		
75-01-4	Vinyl Chloride	100	U
75-35-4	1,1-Dichloroethene	50	U
67-66-3	Chloroform	19	J
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	100	U
56-23-5	Carbon Tetrachloride	50	U
79-01-6	Trichloroethene	50	U
71-43-2	Benzene	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T7

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-011

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

Lab File ID: AK1U15

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____

Date Analyzed: 01/30/92

Column: (pack/cap) CAP

Dilution Factor: 10.0

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

CAS NO.	COMPOUND		
75-01-4	Vinyl Chloride	100	U
75-35-4	1,1-Dichloroethene	50	U
67-66-3	Chloroform	19	J
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	100	U
56-23-5	Carbon Tetrachloride	50	U
79-01-6	Trichloroethene	50	U
71-43-2	Benzene	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-012

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

Lab File ID: AK1U16

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____

Date Analyzed: 01/30/92

Column: (pack/cap) CAP

Dilution Factor: 10.0

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

CAS NO.	COMPOUND		
75-01-4	Vinyl Chloride	100	U
75-35-4	1,1-Dichloroethene	50	U
67-66-3	Chloroform	13	J
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	100	U
56-23-5	Carbon Tetrachloride	50	U
79-01-6	Trichloroethene	50	U
71-43-2	Benzene	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U

VOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-013

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

Lab File ID: AK1U17

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____

Date Analyzed: 01/30/92

Column: (pack/cap) CAP

Dilution Factor: 10.0

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

CAS NO.	COMPOUND		
75-01-4	Vinyl Chloride	100	U
75-35-4	1,1-Dichloroethene	50	U
67-66-3	Chloroform	32	J
107-06-2	1,2-Dichloroethane	50	U
78-93-3	2-Butanone	100	U
56-23-5	Carbon Tetrachloride	50	U
79-01-6	Trichloroethene	50	U
71-43-2	Benzene	50	U
127-18-4	Tetrachloroethene	50	U
108-90-7	Chlorobenzene	50	U

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

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 02/12/92 15:38

	Cust ID:	B018T3		B018T3		B018T3		B018T4		B018T6		B018T7	
Sample Information	RFW#:	001		001 MS		001 MSD		002		003		004	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	D.F.:	1.00		1.00		1.00		1.00		1.00		1.00	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	Nitrobenzene-d5	56	%	78	%	87	%	73	%	63	%	84	%
	2-Fluorobiphenyl	55	%	72	%	84	%	70	%	60	%	81	%
	p-Terphenyl-d14	84	%	68	%	118	%	82	%	75	%	89	%
	Phenol-d5	57	%	71	%	95	%	64	%	60	%	75	%
	2-Fluorophenol	43	%	60	%	95	%	42	%	43	%	58	%
	2,4,6-Tribromophenol	42	%	40	%	87	%	25	%	33	%	37	%
			fl		fl		fl		fl		fl		fl
Phenol		360	U	64	%	98 *	%	350	U	360	U	330	U
bis(2-Chloroethyl)ether		360	U	350	U	350	U	350	U	360	U	330	U
2-Chlorophenol		360	U	63	%	90	%	350	U	360	U	330	U
1,3-Dichlorobenzene		360	U	350	U	350	U	350	U	360	U	330	U
1,4-Dichlorobenzene		360	U	72	%	81	%	350	U	360	U	330	U
Benzyl alcohol		360	U	350	U	350	U	350	U	360	U	330	U
1,2-Dichlorobenzene		360	U	350	U	350	U	350	U	360	U	330	U
2-Methylphenol		360	U	350	U	350	U	350	U	360	U	330	U
bis(2-Chloroisopropyl)ether		360	U	350	U	350	U	350	U	360	U	330	U
4-Methylphenol		360	U	350	U	350	U	350	U	360	U	330	U
N-Nitroso-Di-n-propylamine		360	U	72	%	88	%	350	U	360	U	330	U
Hexachloroethane		360	U	350	U	350	U	350	U	360	U	330	U
Nitrobenzene		360	U	350	U	350	U	350	U	360	U	330	U
Isophorone		360	U	350	U	350	U	350	U	360	U	330	U
2-Nitrophenol		360	U	350	U	350	U	350	U	360	U	330	U
2,4-Dimethylphenol		360	U	350	U	350	U	350	U	360	U	330	U
Benzoic acid		1800	U	1700	U	1800	U	1800	U	1800	U	1700	U
bis(2-Chloroethoxy)methane		360	U	350	U	350	U	350	U	360	U	330	U
2,4-Dichlorophenol		360	U	350	U	350	U	350	U	360	U	330	U
1,2,4-Trichlorobenzene		360	U	85	%	97	%	350	U	360	U	330	U
Naphthalene		360	U	350	U	350	U	350	U	360	U	330	U
4-Chloroaniline		360	U	350	U	350	U	350	U	360	U	330	U
Hexachlorobutadiene		360	U	350	U	350	U	350	U	360	U	330	U
4-Chloro-3-methylphenol		360	U	73	%	114 *	%	350	U	360	U	330	U
2-Methylnaphthalene		360	U	350	U	350	U	350	U	360	U	330	U
Hexachlorocyclopentadiene		360	U	350	U	350	U	350	U	360	U	330	U

*= Outside of EPA CLP QC limits.

000009
9613441.1165

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000

Cust ID:	B018T3		B018T3		B018T3		B018T4		B018T6		B018T7	
RFW#:	001		001 MS		001 MSD		002		003		004	
2,4,6-Trichlorophenol	360	U	350	U	350	U	350	U	360	U	330	U
2,4,5-Trichlorophenol	1800	U	1700	U	1800	U	1800	U	1800	U	1700	U
2-Chloronaphthalene	360	U	350	U	350	U	350	U	360	U	330	U
2-Nitroaniline	1800	U	1700	U	1800	U	1800	U	1800	U	1700	U
Dimethylphthalate	360	U	350	U	350	U	350	U	360	U	330	U
Acenaphthylene	360	U	350	U	350	U	350	U	360	U	330	U
2,6-Dinitrotoluene	360	U	350	U	350	U	350	U	360	U	330	U
3-Nitroaniline	1800	U	1700	U	1800	U	1800	U	1800	U	1700	U
Acenaphthene	360	U	76	%	93	%	350	U	360	U	330	U
2,4-Dinitrophenol	1800	U	1700	U	1800	U	1800	U	1800	U	1700	U
4-Nitrophenol	1800	U	92	%	75	%	1800	U	1800	U	1700	U
Dibenzofuran	360	U	350	U	350	U	350	U	360	U	330	U
2,4-Dinitrotoluene	360	U	76	%	83	%	350	U	360	U	330	U
Diethylphthalate	360	U	350	U	350	U	350	U	360	U	99	J
4-Chlorophenyl-phenylether	360	U	350	U	350	U	350	U	360	U	330	U
Fluorene	360	U	350	U	350	U	350	U	360	U	330	U
4-Nitroaniline	1800	U	1700	U	1800	U	1800	U	1800	U	1700	U
4,6-Dinitro-2-methylphenol	1800	U	1700	U	1800	U	1800	U	1800	U	1700	U
N-Nitrosodiphenylamine (1)	360	U	350	U	350	U	350	U	360	U	330	U
4-Bromophenyl-phenylether	360	U	350	U	350	U	350	U	360	U	330	U
Hexachlorobenzene	360	U	350	U	350	U	350	U	360	U	330	U
Pentachlorophenol	1800	U	92	%	90	%	1800	U	1800	U	1700	U
Phenanthrene	360	U	350	U	350	U	350	U	360	U	330	U
Anthracene	360	U	350	U	350	U	350	U	360	U	330	U
Di-n-Butylphthalate	170	J	160	J	160	J	93	J	120	J	110	J
Fluoranthene	360	U	350	U	350	U	350	U	360	U	330	U
Pyrene	360	U	71	%	147 *	%	350	U	360	U	330	U
Butylbenzylphthalate	360	U	350	U	350	U	350	U	360	U	330	U
3,3'-Dichlorobenzidine	710	U	700	U	710	U	700	U	720	U	660	U
Benzo(a)anthracene	360	U	350	U	350	U	350	U	360	U	330	U
Chrysene	360	U	350	U	350	U	350	U	360	U	330	U
bis(2-Ethylhexyl)phthalate	360	U	41	J	350	U	48	J	360	U	330	U
Di-n-Octyl phthalate	360	U	350	U	350	U	350	U	360	U	330	U
Benzo(b)fluoranthene	360	U	350	U	350	U	350	U	360	U	330	U
Benzo(k)fluoranthene	360	U	350	U	350	U	350	U	360	U	330	U
Benzo(a)pyrene	360	U	350	U	350	U	350	U	360	U	330	U
Indeno(1,2,3-cd)pyrene	360	U	350	U	350	U	350	U	360	U	330	U
Dibenzo(a,h)anthracene	360	U	350	U	350	U	350	U	360	U	330	U
Benzo(g,h,i)perylene	360	U	350	U	350	U	350	U	360	U	330	U

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

9613441.1166 0000010

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

RFW Batch Number: 9201L074 | Client: WESTINGHOUSE HANFORD | Work Order: 6168-02-01-0000 | Report Date: 02/12/92 15:38 | Page: 2a

	Cust ID:	B018T8		SBLK		SBLK BS	
Sample Information	RFW#:	005		92LE0101-MB1		92LE0101-MB1	
	Matrix:	SOIL		SOIL		SOIL	
	D.F.:	1.00		1.00		1.00	
	Units:	ug/Kg		ug/Kg		ug/Kg	
Surrogate Recovery	Nitrobenzene-d5	81	%	100	%	99	%
	2-Fluorobiphenyl	79	%	85	%	87	%
	p-Terphenyl-d14	81	%	104	%	103	%
	Phenol-d5	74	%	83	%	88	%
	2-Fluorophenol	60	%	78	%	83	%
	2,4,6-Tribromophenol	40	%	72	%	88	%
Phenol		330	U	330	U	81	%
bis(2-Chloroethyl)ether		330	U	330	U	330	U
2-Chlorophenol		330	U	330	U	85	%
1,3-Dichlorobenzene		330	U	330	U	330	U
1,4-Dichlorobenzene		330	U	330	U	88	%
Benzyl alcohol		330	U	330	U	330	U
1,2-Dichlorobenzene		330	U	330	U	330	U
2-Methylphenol		330	U	330	U	330	U
bis(2-Chloroisopropyl)ether		330	U	330	U	330	U
4-Methylphenol		330	U	330	U	330	U
N-Nitroso-Di-n-propylamine		330	U	330	U	86	%
Hexachloroethane		330	U	330	U	330	U
Nitrobenzene		330	U	330	U	330	U
Isophorone		330	U	330	U	330	U
2-Nitrophenol		330	U	330	U	330	U
2,4-Dimethylphenol		330	U	330	U	330	U
Benzoic acid		1600	U	1700	U	1700	U
bis(2-Chloroethoxy)methane		330	U	330	U	330	U
2,4-Dichlorophenol		330	U	330	U	330	U
1,2,4-Trichlorobenzene		330	U	330	U	108 *	%
Naphthalene		330	U	330	U	330	U
4-Chloroaniline		330	U	330	U	330	U
Hexachlorobutadiene		330	U	330	U	330	U
4-Chloro-3-methylphenol		330	U	330	U	100	%
2-Methylnaphthalene		330	U	330	U	330	U
Hexachlorocyclopentadiene		330	U	330	U	330	U

*= Outside of EPA CLP QC limits.

961344-167 000011

Cust ID:	B018T8		SBLK		SBLK BS	
RFW#:	005		92LE0101-MB1		92LE0101-MB1	
2,4,6-Trichlorophenol	330	U	330	U	330	U
2,4,5-Trichlorophenol	1600	U	1700	U	1700	U
2-Chloronaphthalene	330	U	330	U	330	U
2-Nitroaniline	1600	U	1700	U	1700	U
Dimethylphthalate	330	U	330	U	330	U
Acenaphthylene	330	U	330	U	330	U
2,6-Dinitrotoluene	330	U	330	U	330	U
3-Nitroaniline	1600	U	1700	U	1700	U
Acenaphthene	330	U	330	U	87	%
2,4-Dinitrophenol	1600	U	1700	U	1700	U
4-Nitrophenol	1600	U	1700	U	104	%
Dibenzofuran	330	U	330	U	330	U
2,4-Dinitrotoluene	330	U	330	U	94 *	%
Diethylphthalate	330	U	330	U	330	U
4-Chlorophenyl-phenylether	330	U	330	U	330	U
Fluorene	330	U	330	U	330	U
4-Nitroaniline	1600	U	1700	U	1700	U
4,6-Dinitro-2-methylphenol	1600	U	1700	U	1700	U
N-Nitrosodiphenylamine (1)	330	U	330	U	330	U
4-Bromophenyl-phenylether	330	U	330	U	330	U
Hexachlorobenzene	330	U	330	U	330	U
Pentachlorophenol	1600	U	1700	U	110 *	%
Phenanthrene	330	U	330	U	330	U
Anthracene	330	U	330	U	330	U
Di-n-Butylphthalate	120	J	330	U	330	U
Fluoranthene	330	U	330	U	330	U
Pyrene	330	U	330	U	97	%
Butylbenzylphthalate	330	U	330	U	330	U
3,3'-Dichlorobenzidine	660	U	670	U	670	U
Benzo(a)anthracene	330	U	330	U	330	U
Chrysene	330	U	330	U	330	U
bis(2-Ethylhexyl)phthalate	35	J	330	U	330	U
Di-n-Octyl phthalate	330	U	330	U	330	U
Benzo(b)fluoranthene	330	U	330	U	330	U
Benzo(k)fluoranthene	330	U	330	U	330	U
Benzo(a)pyrene	330	U	330	U	330	U
Indeno(1,2,3-cd)pyrene	330	U	330	U	330	U
Dibenzo(a,h)anthracene	330	U	330	U	330	U
Benzo(g,h,i)perylene	330	U	330	U	330	U

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

9613441.1168 0000012

WESTON

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 01-18-92
RFW #: 9201L074,SEMIVOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of five (5) soil samples collected on 01-15-92.

The samples were extracted on 01-21-92 and analyzed according to criteria set forth in CLP SOW 02/88 (Rev. 05/89) for TCL Semivolatile target compounds on 02-11,12-92.

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

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

5. The matrix spike duplicate of sample B018T3 was lost on the GPC. The extract before-GPC was analyzed and reported. The prep sheet was corrected to reflect this.

6. Internal standard area and retention time criteria were met.

Jack R. Tuschall, Ph.D. 03.05.92
Date
Laboratory Manager
Lionville Analytical Laboratory

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T3

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: M021112

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 6 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 9.4 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
100-51-6	Benzyl alcohol	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-Di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
65-85-0	Benzoic acid	1800	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U

CLIENT SAMPLE NO.

BO18T3

SEMIVOLATILE ORGANICS ANALYSIS SHEET

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: M021112

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 6 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 9.4 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	360	U
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
84-74-2	Di-n-Butylphthalate	170	J
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	710	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-Octyl phthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

CLIENT SAMPLE NO.

B018T3

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-001

Sample wt/vol: 30.0 (g/mL) G Lab File ID: M021112

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 6 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 9.4 Dilution Factor: 1.00

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	4.48	200	JB
2.	UNKNOWN	4.60	200	JB
3.	ALDOL CONDENSATE	5.97	400	JAB
4.	ALDOL CONDENSATE	6.65	600	JAB
5.	ALDOL CONDENSATE	7.65	200	JA
6.	HYDROCARBON	22.30	200	J

9613441.1174 0000043

CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS SHEET

B018T4

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-002

Sample wt/vol: 30.7 (g/mL) G Lab File ID: M021108

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 7 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 9.2 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	350	U
111-44-4	bis(2-Chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
100-51-6	Benzyl alcohol	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	bis(2-Chloroisopropyl)ether	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-Di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
65-85-0	Benzoic acid	1800	U
111-91-1	bis(2-Chloroethoxy)methane	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U

9613441.1175 0000044

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T4

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-002

Sample wt/vol: 30.7 (g/mL) G Lab File ID: M021108

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 7 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 9.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	350	U
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
84-74-2	Di-n-Butylphthalate	93	J
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3'-Dichlorobenzidine	700	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	bis(2-Ethylhexyl)phthalate	48	J
117-84-0	Di-n-Octyl phthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

(1) - Cannot be separated from Diphenylamine

CLIENT SAMPLE NO.

B018T4

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL

Lab Sample ID: 9201L074-002

Sample wt/vol: 30.7 (g/mL) G

Lab File ID: M021108

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. 7 dec.

Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 9.2

Dilution Factor: 1.00

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	4.48	100	JB
2.	UNKNOWN	4.62	200	JB
3.	ALDOL CONDENSATE	5.97	600	JAB
4.	BENZALDEHYDE	6.30	300	J
5.	ALDOL CONDENSATE	6.67	600	JAB
6.	CHLORINATED BENZENE	9.07	400	J
7.	HYDROCARBON	22.30	200	J

CLIENT SAMPLE NO.

B018T6

SEMIVOLATILE ORGANICS ANALYSIS SHEET

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-003

Sample wt/vol: 30.3 (g/mL) G Lab File ID: M021109

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 8 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 9.2 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	360	U
111-44-4	bis(2-Chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
100-51-6	Benzyl alcohol	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	bis(2-Chloroisopropyl)ether	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-Di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
65-85-0	Benzoic acid	1800	U
111-91-1	bis(2-Chloroethoxy)methane	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U

9613441.1177 0000065

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T6

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-003

Sample wt/vol: 30.3 (g/mL) G Lab File ID: M021109

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 8 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 9.2 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	360	U
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	360	U
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
84-74-2	Di-n-Butylphthalate	120	J
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3'-Dichlorobenzidine	720	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	bis(2-Ethylhexyl)phthalate	360	U
117-84-0	Di-n-Octyl phthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

(1) - Cannot be separated from Diphenylamine

CLIENT SAMPLE NO.

B018T6

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-003

Sample wt/vol: 30.3 (g/mL) G Lab File ID: M021109

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 8 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 9.2 Dilution Factor: 1.00

Number TICs found: 7

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	4.48	100	JB
2.	UNKNOWN	4.60	200	JB
3.	ALDOL CONDENSATE	5.97	400	JAB
4.	ALDOL CONDENSATE	6.67	600	JAB
5.	ALDOL CONDENSATE	7.65	200	JA
6.	CHLORINATED BENZENE	9.07	200	J
7.	HYDROCARBON	22.32	200	J

9613441.1179 0000083

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T7

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-004

Sample wt/vol: 30.4 (g/mL) G Lab File ID: M021110

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 1 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	bis(2-Chloroisopropyl)ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic acid	1700	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1700	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1700	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

9613441.1180 0000087

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T7

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-004

Sample wt/vol: 30.4 (g/mL) G Lab File ID: M021110

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 1 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	1700	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	1700	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	99	J
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	1700	U
534-52-1	4,6-Dinitro-2-methylphenol	1700	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	110	J
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-Octyl phthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

9613441.1181 0000085

CLIENT SAMPLE NO.

BO18T7

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-004

Sample wt/vol: 30.4 (g/mL) G Lab File ID: M021110

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 1 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 8.2 Dilution Factor: 1.00

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	4.48	200	JB
2.	UNKNOWN	4.60	200	JB
3.	ALDOL CONDENSATE	5.95	500	JAB
4.	ALDOL CONDENSATE	6.65	500	JAB
5.	CHLORINATED BENZENE	9.05	300	J
6.	HYDROCARBON	22.28	200	J

CLIENT SAMPLE NO.

B018T8

SEMIVOLATILE ORGANICS ANALYSIS SHEET

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-005

Sample wt/vol: 30.3 (g/mL) G Lab File ID: M021111

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 0 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	bis(2-Chloroisopropyl)ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic acid	1600	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

CLIENT SAMPLE NO.

B018T8

SEMIVOLATILE ORGANICS ANALYSIS SHEET

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-005

Sample wt/vol: 30.3 (g/mL) G Lab File ID: M021111

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 0 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	120	J
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	35	J
117-84-0	Di-n-Octyl phthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

9613441.1184 0000105

CLIENT SAMPLE NO.

BO18T8

SEMIVOLATILE ORGANICS ANALYSIS SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-005

Sample wt/vol: 30.3 (g/mL) G Lab File ID: M021111

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 0 dec. Date Extracted: 01/21/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/11/92

GPC Cleanup: (Y/N) Y pH: 7.8 Dilution Factor: 1.00

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	ALKANE	4.48	200	JB
2.	UNKNOWN	4.60	200	JB
3.	ALDOL CONDENSATE	5.97	400	JAB
4.	ALDOL CONDENSATE	6.67	500	JAB
5.	CHLORINATED BENZENE	9.07	300	J
6.	HYDROCARBON	22.30	300	J

Roy F. Weston, Inc. - Lionville Laboratory
Semivolatiles by GC/MS, TCLP Leachate

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 02/21/92 15:51 Page: 1a

	Cust ID:	BO18T3		BO18T3		BO18T4		BO18T6		BO18T7		BO18T5	
Sample Information	RFW#:	014		014 MS		015		016		017		018	
	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	60	%	62	%	68	%	62	%	64	%	61	%
	2-Fluorobiphenyl	51	%	61	%	57	%	49	%	56	%	50	%
	p-Terphenyl-d14	97	%	119	%	74	%	106	%	105	%	74	%
	Phenol-d5	75	%	86	%	87	%	84	%	85	%	75	%
	2-Fluorophenol	71	%	83	%	84	%	79	%	77	%	72	%
	2,4,6-Tribromophenol	32	%	85	%	49	%	11	%	19	%	103	%
			fl		fl		fl		fl		fl		fl
Pyridine		100	U	54	%	100	U	100	U	100	U	100	U
1,4-Dichlorobenzene		100	U	44	%	100	U	100	U	100	U	100	U
2-Methylphenol		100	U	66	%	100	U	100	U	100	U	100	U
3- and/or 4-Methylphenol		100	U	76	%	100	U	100	U	100	U	100	U
Hexachloroethane		100	U	33	%	100	U	100	U	100	U	100	U
Nitrobenzene		100	U	58	%	100	U	100	U	100	U	100	U
Hexachlorobutadiene		100	U	31	%	100	U	100	U	100	U	100	U
2,4,6-Trichlorophenol		100	U	87	%	100	U	100	U	100	U	100	U
2,4,5-Trichlorophenol		500	U	78	%	500	U	500	U	500	U	500	U
2,4-Dinitrotoluene		100	U	67	%	100	U	100	U	100	U	100	U
Hexachlorobenzene		100	U	98	%	100	U	100	U	100	U	100	U
Pentachlorophenol		500	U	44	%	500	U	500	U	500	U	500	U

*= Outside of EPA CLP QC limits.

9634411.1185 00006009

Roy F. Weston, Inc. - Lionville Laboratory
Semivolatiles by GC/MS, TCLP Leachate

RFW Batch Number: 9201L074 | Client: WESTINGHOUSE HANFORD | Work Order: 6168-02-01-0000 | Report Date: 02/21/92 15:51 | Page: 2a

	Cust ID:	BO18T8		SBLK		SBLK BS		LCHBLK	
Sample Information	RFW#:	019		92LE0122-MB1		92LE0122-MB1		92LTO005-LB1	
	Matrix:	WATER		WATER		WATER		WATER	
	D.F.:	1.00		1.00		1.00		1.00	
	Units:	ug/L		ug/L		ug/L		ug/L	
Surrogate Recovery	Nitrobenzene-d5	71	%	63	%	76	%	67	%
	2-Fluorobiphenyl	56	%	56	%	70	%	49	%
	p-Terphenyl-d14	81	%	82	%	94	%	96	%
	Phenol-d5	94	%	89	%	79	%	94	%
	2-Fluorophenol	88	%	84	%	76	%	92	%
	2,4,6-Tribromophenol	109	%	60	%	84	%	46	%
Pyridine		100	U	10	U	70	%	100	U
1,4-Dichlorobenzene		100	U	10	U	46	%	100	U
2-Methylphenol		100	U	10	U	70	%	100	U
3- and/or 4-Methylphenol		100	U	10	U	76	%	100	U
Hexachloroethane		100	U	10	U	35	%	100	U
Nitrobenzene		100	U	10	U	72	%	100	U
Hexachlorobutadiene		100	U	10	U	34	%	100	U
2,4,6-Trichlorophenol		100	U	10	U	85	%	100	U
2,4,5-Trichlorophenol		500	U	50	U	79	%	500	U
2,4-Dinitrotoluene		100	U	10	U	75	%	100	U
Hexachlorobenzene		100	U	10	U	96	%	100	U
Pentachlorophenol		500	U	50	U	18	%	500	U

*= Outside of EPA CLP QC limits.

961244.1186 0056010

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 01-18-92
RFW #: 9201L074, SEMIVOLATILE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of six (6) leachate samples generated on 01-22-92 from soils collected on 01-15-92.

The samples were extracted on 01-27-92 and analyzed according to criteria set forth in CLP SOW 02/88 (Rev. 05/89) for TCLP Semivolatile target compounds on 01-30-92 and 02-14,20,21-92.

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

1. Samples were analyzed at ten-fold dilutions due to the acidic leachate matrix; however all TCLP regulatory limits were achieved.

2. All surrogate recoveries were within EPA QC limits.

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

4. The matrix spike duplicate of sample B018T3 was lost during extraction.

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

6. Internal standard area and retention time criteria were met.

Jack R. Tuschall, Ph.D. 03.04.92.
Date
Laboratory Manager
Lionville Analytical Laboratory

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T3

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-014

Sample wt/vol: 100 (g/mL) ML

Lab File ID: J013006

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 01/30/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
110-86-1	Pyridine	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	3- and/or 4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T4

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9201L074-015

Sample wt/vol: 100 (g/mL) ML Lab File ID: J013008

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. _____ dec. Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/30/92

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

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

CAS NO.	COMPOUND		
110-86-1	Pyridine	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	3- and/or 4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U

9613441.1190 0055542

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9201L074-016

Sample wt/vol: 100 (g/mL) ML Lab File ID: J013009

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. _____ dec. Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/30/92

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

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

CAS NO.	COMPOUND		
110-86-1	Pyridine	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	3- and/or 4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U

9613441.1191 1B 0000549

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T7

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9201L074-017

Sample wt/vol: 100 (g/mL) ML Lab File ID: J013010

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. _____ dec. Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 01/30/92

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

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

CAS NO.	COMPOUND		
110-86-1	Pyridine	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	3- and/or 4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U

9613441.1192 0000056

SEMIVOLATILE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-018

Sample wt/vol: 100 (g/mL) ML

Lab File ID: J021406

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 02/14/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
110-86-1	Pyridine	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	3- and/or 4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U

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1B

CLIENT SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS SHEET

B018T8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9201L074-019

Sample wt/vol: 100 (g/mL) ML Lab File ID: J021407

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. _____ dec. Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 02/14/92

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

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

CAS NO.	COMPOUND		
110-86-1	Pyridine	100	U
106-46-7	1,4-Dichlorobenzene	100	U
95-48-7	2-Methylphenol	100	U
106-44-5	3- and/or 4-Methylphenol	100	U
67-72-1	Hexachloroethane	100	U
98-95-3	Nitrobenzene	100	U
87-68-3	Hexachlorobutadiene	100	U
88-06-2	2,4,6-Trichlorophenol	100	U
95-95-4	2,4,5-Trichlorophenol	500	U
121-14-2	2,4-Dinitrotoluene	100	U
118-74-1	Hexachlorobenzene	100	U
87-86-5	Pentachlorophenol	500	U

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

Report Date: 02/14/92 13:51

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000

	Cust ID:	B018T3		B018T3		B018T3		B018T4		B018T6		B018T7	
Sample Information	RFW#:	001		001 MS		001 MSD		002		003		004	
	Matrix:	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	D.F.:	1.00		4.00		4.00		1.00		1.00		1.00	
	Units:	ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
Surrogate: Di-n-butylchlorendate		93	%	99	%	165 *	%	135	%	97	%	86	%
==========			fl		fl		fl		fl		fl		fl
Alpha-BHC		8.5	U	34	U	34	U	8.6	U	8.7	U	8.1	U
Beta-BHC		8.5	U	34	U	34	U	8.6	U	8.7	U	8.1	U
Delta-BHC		8.5	U	34	U	34	U	8.6	U	8.7	U	8.1	U
gamma-BHC (Lindane)		8.5	U	50	%	58	%	8.6	U	8.7	U	8.1	U
Heptachlor		8.5	U	75	%	85	%	8.6	U	8.7	U	8.1	U
Aldrin		8.5	U	40	%	48	%	8.6	U	8.7	U	8.1	U
Heptachlor epoxide		8.5	U	34	U	34	U	8.6	U	8.7	U	8.1	U
Endosulfan I		8.5	U	34	U	34	U	8.6	U	8.7	U	8.1	U
Dieldrin		17	U	66	%	75	%	17	U	17	U	16	U
4,4'-DDE		17	U	68	U	68	U	17	U	17	U	16	U
Endrin		17	U	65	%	78	%	17	U	17	U	16	U
Endosulfan II		17	U	68	U	68	U	17	U	17	U	16	U
4,4'-DDD		17	U	68	U	68	U	17	U	17	U	16	U
Endosulfan sulfate		17	U	68	U	68	U	17	U	17	U	16	U
4,4'-DDT		17	U	52	%	62	%	17	U	17	U	16	U
Methoxychlor		85	U	340	U	340	U	86	U	87	U	81	U
Endrin ketone		17	U	68	U	68	U	17	U	17	U	16	U
alpha-Chlordane		85	U	340	U	340	U	86	U	87	U	81	U
gamma-Chlordane		85	U	340	U	340	U	86	U	87	U	81	U
Toxaphene		170	U	680	U	680	U	170	U	170	U	160	U
Aroclor-1016		85	U	340	U	340	U	86	U	87	U	81	U
Aroclor-1221		85	U	340	U	340	U	86	U	87	U	81	U
Aroclor-1232		85	U	340	U	340	U	86	U	87	U	81	U
Aroclor-1242		85	U	340	U	340	U	86	U	87	U	81	U
Aroclor-1248		85	U	340	U	340	U	86	U	87	U	81	U
Aroclor-1254		170	U	680	U	680	U	170	U	170	U	160	U
Aroclor-1260		170	U	680	U	680	U	170	U	170	U	160	U

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

9613441.1194 0050509

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

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000 Report Date: 02/14/92 13:51 Page: 2

	Cust ID:	B018T8	PBLK	PBLK BS
Sample Information	RFW#:	005	92LE0103-MB1	92LE0103-MB1
	Matrix:	SOIL	SOIL	SOIL
	D.F.:	1.00	1.00	4.00
	Units:	ug/Kg	ug/Kg	ug/Kg

Surrogate: Di-n-butylchlorendate	I	%	I	%	I	%
Alpha-BHC	8.0	U	8.0	U	32	U
Beta-BHC	8.0	U	8.0	U	32	U
Delta-BHC	8.0	U	8.0	U	32	U
gamma-BHC (Lindane)	8.0	U	8.0	U	60	%
Heptachlor	8.0	U	8.0	U	82	%
Aldrin	8.0	U	8.0	U	48	%
Heptachlor epoxide	8.0	U	8.0	U	32	U
Endosulfan I	8.0	U	8.0	U	32	U
Dieldrin	16	U	16	U	77	%
4,4'-DDE	16	U	16	U	64	U
Endrin	16	U	16	U	86	%
Endosulfan II	16	U	16	U	64	U
4,4'-DDD	16	U	16	U	64	U
Endosulfan sulfate	16	U	16	U	64	U
4,4'-DDT	16	U	16	U	70	%
Methoxychlor	80	U	80	U	320	U
Endrin ketone	16	U	16	U	64	U
alpha-Chlordane	80	U	80	U	320	U
gamma-Chlordane	80	U	80	U	320	U
Toxaphene	160	U	160	U	640	U
Aroclor-1016	80	U	80	U	320	U
Aroclor-1221	80	U	80	U	320	U
Aroclor-1232	80	U	80	U	320	U
Aroclor-1242	80	U	80	U	320	U
Aroclor-1248	80	U	80	U	320	U
Aroclor-1254	160	U	160	U	640	U
Aroclor-1260	160	U	160	U	640	U

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

96134.1195 000010

9613441.1196 11A

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 01-18-92
RFW #: 9201L074, PEST/PCB
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of five (5) soil samples collected on 01-15-92.

The samples were extracted on 01-22-92 and analyzed according to criteria set forth in the Contract Laboratory Program for Pesticide and PCB target compounds on 02-07,08-92.

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 on the primary column.

2. For continuing calibration standards analyzed prior to the sample extracts, the 20% criteria for calibration factors were exceeded for delta-BHC on the SP2100 on 02-07-92 at 22:30.

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

4. One (1) of six (6) obtainable surrogate recoveries was outside EPA QC limits. The "DBC" surrogate recovery for sample B018T3 (165%) was outside the EPA QC limit of 150%.

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

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

7. The blank spike and matrix spike samples required four-fold dilutions to maintain the pesticide concentrations within the linear range of the instrument.

Margaret M. Leady 2-20-92

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

9613941.1197 0000019

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T3

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-001

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 02059213.77

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 6 dec. Date Extracted: 01/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/08/92

GPC Cleanup: (Y/N) Y pH: 9.3 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	8.5	U
319-85-7	Beta-BHC	8.5	U
319-86-8	Delta-BHC	8.5	U
58-89-9	gamma-BHC (Lindane)	8.5	U
76-44-8	Heptachlor	8.5	U
309-00-2	Aldrin	8.5	U
1024-57-3	Heptachlor epoxide	8.5	U
959-98-8	Endosulfan I	8.5	U
60-57-1	Dieldrin	17	U
72-55-9	4,4'-DDE	17	U
72-20-8	Endrin	17	U
33213-65-9	Endosulfan II	17	U
72-54-8	4,4'-DDD	17	U
1031-07-8	Endosulfan sulfate	17	U
50-29-3	4,4'-DDT	17	U
72-43-5	Methoxychlor	85	U
53494-70-5	Endrin ketone	17	U
5103-71-9	alpha-Chlordane	85	U
5103-74-2	gamma-Chlordane	85	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	85	U
11104-28-2	Aroclor-1221	85	U
11141-16-5	Aroclor-1232	85	U
53469-21-9	Aroclor-1242	85	U
12672-29-6	Aroclor-1248	85	U
11097-69-1	Aroclor-1254	170	U
11096-82-5	Aroclor-1260	170	U

DS 2-17-92

9613441.1198 0000023

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T4

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-002

Sample wt/vol: 30.1 (g/mL) G Lab File ID: 02059213.80

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 7 dec. Date Extracted: 01/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/08/92

GPC Cleanup: (Y/N) Y pH: 9.1 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	8.6	U
319-85-7	Beta-BHC	8.6	U
319-86-8	Delta-BHC	8.6	U
58-89-9	gamma-BHC (Lindane)	8.6	U
76-44-8	Heptachlor	8.6	U
309-00-2	Aldrin	8.6	U
1024-57-3	Heptachlor epoxide	8.6	U
959-98-8	Endosulfan I	8.6	U
60-57-1	Dieldrin	17	U
72-55-9	4,4'-DDE	17	U
72-20-8	Endrin	17	U
33213-65-9	Endosulfan II	17	U
72-54-8	4,4'-DDD	17	U
1031-07-8	Endosulfan sulfate	17	U
50-29-3	4,4'-DDT	17	U
72-43-5	Methoxychlor	86	U
53494-70-5	Endrin ketone	17	U
5103-71-9	alpha-Chlordane	86	U
5103-74-2	gamma-Chlordane	86	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	86	U
11104-28-2	Aroclor-1221	86	U
11141-16-5	Aroclor-1232	86	U
53469-21-9	Aroclor-1242	86	U
12672-29-6	Aroclor-1248	86	U
11097-69-1	Aroclor-1254	170	U
11096-82-5	Aroclor-1260	170	U

DG 2-17-92

9613441.1199 0000027

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T6

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-003

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 02059213.81

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 8 dec. Date Extracted: 01/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/08/92

GPC Cleanup: (Y/N) Y pH: 9.1 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	8.7	U
319-85-7	Beta-BHC	8.7	U
319-86-8	Delta-BHC	8.7	U
58-89-9	gamma-BHC (Lindane)	8.7	U
76-44-8	Heptachlor	8.7	U
309-00-2	Aldrin	8.7	U
1024-57-3	Heptachlor epoxide	8.7	U
959-98-8	Endosulfan I	8.7	U
60-57-1	Dieldrin	17	U
72-55-9	4,4'-DDE	17	U
72-20-8	Endrin	17	U
33213-65-9	Endosulfan II	17	U
72-54-8	4,4'-DDD	17	U
1031-07-8	Endosulfan sulfate	17	U
50-29-3	4,4'-DDT	17	U
72-43-5	Methoxychlor	87	U
53494-70-5	Endrin ketone	17	U
5103-71-9	alpha-Chlordane	87	U
5103-74-2	gamma-Chlordane	87	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	87	U
11104-28-2	Aroclor-1221	87	U
11141-16-5	Aroclor-1232	87	U
53469-21-9	Aroclor-1242	87	U
12672-29-6	Aroclor-1248	87	U
11097-69-1	Aroclor-1254	170	U
11096-82-5	Aroclor-1260	170	U

DS 2-17-92

9613441.1200 0000032

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T7

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-004

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 02059213.84

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 1 dec. Date Extracted: 01/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/08/92

GPC Cleanup: (Y/N) Y pH: 7.6 Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
319-84-6	Alpha-BHC	8.1	U
319-85-7	Beta-BHC	8.1	U
319-86-8	Delta-BHC	8.1	U
58-89-9	gamma-BHC (Lindane)	8.1	U
76-44-8	Heptachlor	8.1	U
309-00-2	Aldrin	8.1	U
1024-57-3	Heptachlor epoxide	8.1	U
959-98-8	Endosulfan I	8.1	U
60-57-1	Dieldrin	16	U
72-55-9	4,4'-DDE	16	U
72-20-8	Endrin	16	U
33213-65-9	Endosulfan II	16	U
72-54-8	4,4'-DDD	16	U
1031-07-8	Endosulfan sulfate	16	U
50-29-3	4,4'-DDT	16	U
72-43-5	Methoxychlor	81	U
53494-70-5	Endrin ketone	16	U
5103-71-9	alpha-Chlordane	81	U
5103-74-2	gamma-Chlordane	81	U
8001-35-2	Toxaphene	160	U
12674-11-2	Aroclor-1016	81	U
11104-28-2	Aroclor-1221	81	U
11141-16-5	Aroclor-1232	81	U
53469-21-9	Aroclor-1242	81	U
12672-29-6	Aroclor-1248	81	U
11097-69-1	Aroclor-1254	160	U
11096-82-5	Aroclor-1260	160	U

DG 2-17-92

9613441.1201 0000037

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T8

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

Client: WESTINGHOUSE HANFORD

Matrix: SOIL Lab Sample ID: 9201L074-005

Sample wt/vol: 30.0 (g/mL) G Lab File ID: 02059213.85

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. 0 dec. Date Extracted: 01/22/92

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 02/08/92

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	
319-84-6	Alpha-BHC	8.0	U
319-85-7	Beta-BHC	8.0	U
319-86-8	Delta-BHC	8.0	U
58-89-9	gamma-BHC (Lindane)	8.0	U
76-44-8	Heptachlor	8.0	U
309-00-2	Aldrin	8.0	U
1024-57-3	Heptachlor epoxide	8.0	U
959-98-8	Endosulfan I	8.0	U
60-57-1	Dieldrin	16	U
72-55-9	4,4'-DDE	16	U
72-20-8	Endrin	16	U
33213-65-9	Endosulfan II	16	U
72-54-8	4,4'-DDD	16	U
1031-07-8	Endosulfan sulfate	16	U
50-29-3	4,4'-DDT	16	U
72-43-5	Methoxychlor	80	U
53494-70-5	Endrin ketone	16	U
5103-71-9	alpha-Chlordane	80	U
5103-74-2	gamma-Chlordane	80	U
8001-35-2	Toxaphene	160	U
12674-11-2	Aroclor-1016	80	U
11104-28-2	Aroclor-1221	80	U
11141-16-5	Aroclor-1232	80	U
53469-21-9	Aroclor-1242	80	U
12672-29-6	Aroclor-1248	80	U
11097-69-1	Aroclor-1254	160	U
11096-82-5	Aroclor-1260	160	U

DM 2-17-92

Roy F. Weston, Inc. - Lionville Laboratory
Pesticide by GC, TCLP Leachate

Report Date: 02/18/92 15:07

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000

	Cust ID:	B018T3	B018T3	B018T4	B018T6	B018T7	B018T5
Sample Information	RFW#:	014	014 MS	015	016	017	018
	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: Di-n-butylchlorendate		109 %	95 %	108 %	75 %	92 %	126 %
		fl	fl	fl	fl	fl	fl
Heptachlor		0.10 U	125 %	0.12 U	0.11 U	0.12 U	0.10 U
alpha-Chlordane		1.0 U	75 %	1.2 U	1.1 U	1.2 U	1.0 U
gamma-Chlordane		1.0 U	85 %	1.2 U	1.1 U	1.2 U	1.0 U
gamma-BHC (Lindane)		0.10 U	70 %	0.12 U	0.11 U	0.12 U	0.10 U
Endrin		0.21 U	110 %	0.24 U	0.22 U	0.23 U	0.21 U
Methoxychlor		1.0 U	90 %	1.2 U	1.1 U	1.2 U	1.0 U
Toxaphene		2.1 U	2.1 U	2.4 U	2.2 U	2.3 U	2.1 U
Heptachlor Epoxide		0.10 U	65 %	0.12 U	0.11 U	0.12 U	0.10 U

	Cust ID:	B018T8	PBLK	PBLK BS	LCHBLK
Sample Information	RFW#:	019	92LE0124-MB1	92LE0124-MB1	92LT0005-LB1
	Matrix:	WATER	WATER	WATER	WATER
	D.F.:	1.00	1.00	5.00	1.00
	Units:	ug/L	ug/L	ug/L	ug/L
Surrogate: Di-n-butylchlorendate		115 %	109 %	91 %	100 %
		fl	fl	fl	fl
Heptachlor		0.10 U	0.050 U	I %	0.096 U
alpha-Chlordane		1.0 U	0.50 U	70 %	0.96 U
gamma-Chlordane		1.0 U	0.50 U	80 %	0.96 U
gamma-BHC (Lindane)		0.10 U	0.050 U	50 %	0.096 U
Endrin		0.20 U	0.10 U	115 %	0.19 U
Methoxychlor		1.0 U	0.50 U	73 %	0.96 U
Toxaphene		2.0 U	1.0 U	5.0 U	1.9 U
Heptachlor Epoxide		0.10 U	0.050 U	60 %	0.096 U

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

00006059
9213441.1202

9613441.1203 10A

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 01-18-92
RFW #: 9201L074, PESTICIDE
W.O. #: 6168-02-01

NARRATIVE

The set of samples consisted of six (6) leachate samples generated on 01-22-92 from soil samples collected on 01-15-92.

The samples were extracted on 01-27-92 and analyzed according to criteria set forth in the Contract Laboratory Program for TCLP Pesticide target compounds on 02-15-92.

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 all compounds except 4,4'-DDT on the primary column (RSD of calibration factors exceeded 10%). Quantitation of target compounds was not required.

   Breakdown criteria was exceeded 20% for 4,4'-DDT and endrin on the confirmation column for the standard analyzed on 02-14-92 at 17:52. Evaluation of the data obtained with the SP2250/2401 column indicated that these parameters were not in the samples.

2. For continuing calibration criteria analyzed prior to the sample extracts, the 15%/20% criteria for calibration factors were exceeded for endrin on the SP2250/2401 column on 02-15-92 at 07:13 and on the SP2100 column on 02-15-92 at 07:16.

3. Retention time criteria were met for all compounds on both the primary and confirmation columns in standards analyzed prior to sample extracts.

4. All surrogate recoveries were within EPA QC limits.

5. All blank spike recoveries were within the range of 50% to 115%.

WESTON

6. The blank spike sample required a five-fold dilution to maintain the pesticide concentrations within the linear range of the instrument.

Margaret M. Beaty 2-21-92

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

9613441.1205 0000018

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T3

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9201L074-014

Sample wt/vol: 480 (g/mL) ML Lab File ID: 02149213.13

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. _____ dec. Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 02/15/92

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

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

CAS NO.	COMPOUND		
76-44-8	Heptachlor	0.10	U
5103-71-9	alpha-Chlordane	1.0	U
5103-74-2	gamma-Chlordane	1.0	U
58-89-9	gamma-BHC (Lindane)	0.10	U
72-20-8	Endrin	0.21	U
72-43-5	Methoxychlor	1.0	U
8001-35-2	Toxaphene	2.1	U
1024-57-3	Heptachlor Epoxide	0.10	U

DS 2-19-92

FORM 1 PEST 12/88 Rev.

9613441.1206 0000023

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T4

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-015

Sample wt/vol: 410 (g/mL) ML

Lab File ID: 02149213.14

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 02/15/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
76-44-8	Heptachlor	0.12	U
5103-71-9	alpha-Chlordane	1.2	U
5103-74-2	gamma-Chlordane	1.2	U
58-89-9	gamma-BHC (Lindane)	0.12	U
72-20-8	Endrin	0.24	U
72-43-5	Methoxychlor	1.2	U
8001-35-2	Toxaphene	2.4	U
1024-57-3	Heptachlor Epoxide	0.12	U

DS 2-19-92

FORM 1 PEST 12/88 Rev.

9613441.1207 0000029

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9201L074-016

Sample wt/vol: 460 (g/mL) ML Lab File ID: 02149213.15

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. _____ dec. Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 02/15/92

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

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

CAS NO.	COMPOUND		
76-44-8	Heptachlor	0.11	U
5103-71-9	alpha-Chlordane	1.1	U
5103-74-2	gamma-Chlordane	1.1	U
58-89-9	gamma-BHC (Lindane)	0.11	U
72-20-8	Endrin	0.22	U
72-43-5	Methoxychlor	1.1	U
8001-35-2	Toxaphene	2.2	U
1024-57-3	Heptachlor Epoxide	0.11	U

DS 2-19-92

FORM 1 PEST 12/88 Rev.

9613441.1208 0000033

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T7

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-017

Sample wt/vol: 430 (g/mL) ML

Lab File ID: 02149213.16

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 02/15/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
76-44-8	Heptachlor	0.12	U
5103-71-9	alpha-Chlordane	1.2	U
5103-74-2	gamma-Chlordane	1.2	U
58-89-9	gamma-BHC (Lindane)	0.12	U
72-20-8	Endrin	0.23	U
72-43-5	Methoxychlor	1.2	U
8001-35-2	Toxaphene	2.3	U
1024-57-3	Heptachlor Epoxide	0.12	U

DS 2-19-92

FORM 1 PEST 12/88 Rev.

9613441.1209 0000038

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-018

Sample wt/vol: 480 (g/mL) ML

Lab File ID: 02149213.17

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 02/15/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
76-44-8	Heptachlor	0.10	U
5103-71-9	alpha-Chlordane	1.0	U
5103-74-2	gamma-Chlordane	1.0	U
58-89-9	gamma-BHC (Lindane)	0.10	U
72-20-8	Endrin	0.21	U
72-43-5	Methoxychlor	1.0	U
8001-35-2	Toxaphene	2.1	U
1024-57-3	Heptachlor Epoxide	0.10	U

DS 2-19-92

FORM 1 PEST 12/88 Rev.

9613441.1210 0000043

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-019

Sample wt/vol: 490 (g/mL) ML

Lab File ID: 02149213.20

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 02/15/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
76-44-8	Heptachlor	0.10	U
5103-71-9	alpha-Chlordane	1.0	U
5103-74-2	gamma-Chlordane	1.0	U
58-89-9	gamma-BHC (Lindane)	0.10	U
72-20-8	Endrin	0.20	U
72-43-5	Methoxychlor	1.0	U
8001-35-2	Toxaphene	2.0	U
1024-57-3	Heptachlor Epoxide	0.10	U

RS 2-19-92

FORM 1 PEST 12/88 Rev.

Roy F. Weston, Inc. - Lionville Laboratory
HERBICIDES BY GC, TCLP LEACHATE

Report Date: 02/14/92 13:39

RFW Batch Number: 9201L074 Client: WESTINGHOUSE HANFORD Work Order: 6168-02-01-0000

	Cust ID:	B018T3	B018T3	B018T3	B018T4	B018T6	B018T7
Sample Information	RFW#:	014	014 MS	014 MSD	015	016	017
	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:	2,6-D	79 %	81 %	81 %	79 %	80 %	81 %
2,4-D		10 U	68 %	66 %	10 U	10 U	10 U
2,4,5-TP (Silvex)		5.0 U	65 %	65 %	5.0 U	5.0 U	5.0 U
2,4,5-T		5.0 U	67 %	66 %	5.0 U	5.0 U	5.0 U

	Cust ID:	B018T5	B018T8	PBLK	PBLK BS	PBLK BSD	LCHBLK
Sample Information	RFW#:	018	019	92LE0119-MB1	92LE0119-MB1	92LE0119-MB1	92LT0005-LB1
	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:	2,6-D	80 %	75 %	54 %	63 %	70 %	66 %
2,4-D		10 U	10 U	10 U	49 %	59 %	10 U
2,4,5-TP (Silvex)		5.0 U	5.0 U	5.0 U	53 %	58 %	5.0 U
2,4,5-T		5.0 U	5.0 U	5.0 U	54 %	61 %	5.0 U

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

9613441.1211 00009

9613441.1213A

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD
RFW #: 9201L074, HERBICIDE
W.O. #: 6168-02-01

SAMPLES RECEIVED: 01-18-92

NARRATIVE

The set of samples consisted of six (6) leachate samples generated on 01-22-92 from soil samples collected on 01-15-92.

The samples were extracted on 01-27-92 and analyzed according to criteria set forth in the Method 8150 for Chlorinated Phenoxy Acid Herbicide target compounds on 02-13-92.

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

1. All surrogate recoveries were within the range of 54% to 81%.

2. All matrix spike recoveries were within the range of 65% to 68%.

2. All blank spike recoveries were within the laboratory control chart warning limits.

Margaret M. Beaty 2-21-92

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

Date

9613441.1213 0000015
1D

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T3

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-014

Sample wt/vol: 100 (g/mL) ML

Lab File ID: 02139211.12

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 02/13/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
94-75-7	2,4-D	10	U
93-72-1	2,4,5-TP (Silvex)	5.0	U
93-76-5	2,4,5-T	5.0	U

DS 2/6/92

FORM 1 PEST 12/88 Rev.

9613441.1214 0000018
1D

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T4

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER Lab Sample ID: 9201L074-015

Sample wt/vol: 100 (g/mL) ML Lab File ID: 02139211.15

Level: (low/med) LOW Date Received: 01/18/92

% Moisture: not dec. _____ dec. Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 02/13/92

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

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

CAS NO.	COMPOUND		
94-75-7	2,4-D	10	U
93-72-1	2,4,5-TP (Silvex)	5.0	U
93-76-5	2,4,5-T	5.0	U

DS 2-16-92

FORM 1 PEST 12/88 Rev.

9613441.1215 0000021
1D

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T6

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-016

Sample wt/vol: 100 (g/mL) ML

Lab File ID: 02139211.16

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 02/13/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
94-75-7	2,4-D	10	U
93-72-1	2,4,5-TP (Silvex)	5.0	U
93-76-5	2,4,5-T	5.0	U

DG
2-16-92

FORM 1 PEST 12/88 Rev.

9613441.1216 0000024
ID

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T7

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-017

Sample wt/vol: 100 (g/mL) ML

Lab File ID: 02139211.17

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 02/13/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
94-75-7	2,4-D	10	U
93-72-1	2,4,5-TP (Silvex)	5.0	U
93-76-5	2,4,5-T	5.0	U

DS 2/6/92

FORM 1 PEST 12/88 Rev.

9613441.1217 0000027
1D

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T5

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-018

Sample wt/vol: 100 (g/mL) ML

Lab File ID: 02139211.20

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 02/13/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
94-75-7	2,4-D	10	U
93-72-1	2,4,5-TP (Silvex)	5.0	U
93-76-5	2,4,5-T	5.0	U

DG
2-16-92

FORM 1 PEST 12/88 Rev.

9613441.1218 0000030

1D

PESTICIDE ORGANICS ANALYSIS SHEET

CLIENT SAMPLE NO.

B018T8

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

Client: WESTINGHOUSE HANFORD

Matrix: WATER

Lab Sample ID: 9201L074-019

Sample wt/vol: 100 (g/mL) ML

Lab File ID: 02139211.21

Level: (low/med) LOW

Date Received: 01/18/92

% Moisture: not dec. _____ dec.

Date Extracted: 01/27/92

Extraction: (SepF/Cont/Sonc) SEPF

Date Analyzed: 02/13/92

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

Dilution Factor: 1.00

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

CAS NO.	COMPOUND		
94-75-7	2,4-D	10	U
93-72-1	2,4,5-TP (Silvex)	5.0	U
93-76-5	2,4,5-T	5.0	U

DS 2-16-92

FORM 1 PEST 12/88 Rev.

9613441.1219

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLES RECEIVED:** 01-18-92
RFW #: 9201L074
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. All sample holding times as required by 40CFR136 were met.

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%. All %RPD were within the 20% 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. 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% 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).

2.4.92
Date

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

MAR 1992
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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 02/03/92

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

WESTON BATCH #: 9201L074

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	BO18T3	% Solids	92.8		%	0.10
		Chloride by IC	1.4		MG/KG	1.3
		Fluoride by IC	2.7	u	MG/KG	2.7
		Nitrate by IC	4.9		MG/KG	1.3
		Cyanide, Total	1.1	u	MG/KG	1.1
		Phosphate by IC	3.2		MG/KG	1.3
		Sulfate by IC	12.4		MG/KG	1.3
-002	BO18T4	% Solids	92.8		%	0.10
		Chloride by IC	1.3	u	MG/KG	1.3
		Fluoride by IC	2.7	u	MG/KG	2.7
		Nitrate by IC	11.3		MG/KG	1.3
		Cyanide, Total	1.1	u	MG/KG	1.1
		Phosphate by IC	54.8		MG/KG	1.3
		Sulfate by IC	14.9		MG/KG	1.3
-003	BO18T6	% Solids	91.6		%	0.10
		Chloride by IC	1.4		MG/KG	1.4
		Fluoride by IC	2.7	u	MG/KG	2.7
		Nitrate by IC	17.0		MG/KG	1.4
		Cyanide, Total	1.1	u	MG/KG	1.1
		Phosphate by IC	3.3		MG/KG	1.4
		Sulfate by IC	17.3		MG/KG	1.4
-004	BO18T7	% Solids	99.8		%	0.10
		Chloride by IC	2.4		MG/KG	1.3
		Fluoride by IC	2.5	u	MG/KG	2.5
		Nitrate by IC	1.3	u	MG/KG	1.3
		Cyanide, Total	1.0	u	MG/KG	1.0
		Phosphate by IC	1.3	u	MG/KG	1.3
		Sulfate by IC	1.6		MG/KG	1.3
-005	BO18T8	% Solids	99.7		%	0.10
		Chloride by IC	2.9		MG/KG	1.3
		Fluoride by IC	2.5	u	MG/KG	2.5
		Nitrate by IC	1.3	u	MG/KG	1.3
		Cyanide, Total	1.0	u	MG/KG	1.0
		Phosphate by IC	1.3	u	MG/KG	1.3
		Sulfate by IC	2.9		MG/KG	1.3
-006	BO18T9	% Solids	81.3		%	0.10

Roy F. Weston, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD CO. **SAMPLES RECEIVED:** 01/18/92
RFW #: 9201L074
W.O. #: 6168-02-01

METALS NARRATIVE

The set of samples consisted of five (5) soil samples collected on 01/15/92. There were five (5) leachate samples generated on 01/22/92, from the above soil samples.

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.

6. All matrix spike recoveries were within the 75-125% control limits with the exception of Sb and Se. All corresponding samples were flagged with an "N" according to CLP protocol.

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

8. 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

9. 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).

10. Quarterly Detection Limits for IC3 are included in this package.

11. 92L0364-LC2 was outside the 80-120% window for silver; Weston has established a policy to redigest and reanalyze silver where laboratory control standards fall below 40%.

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

3.2.92
Date

mlj\ clp-met.nar

9613441.1223 0000011

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

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

WESTON BATCH #: 9201L074

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	BO18T3	Silver, Total	2.2	u	MG/KG	2.2
		Aluminum, Total	2770		MG/KG	43.1
		Arsenic, Total	2.2	u	MG/KG	2.2
		Barium, Total	45.8		MG/KG	43.1
		Beryllium, Total	1.1	u	MG/KG	1.1
		Calcium, Total	7610		MG/KG	1080
		Cadmium, Total	1.1	u	MG/KG	1.1
		Cobalt, Total	10.8	u	MG/KG	10.8
		Chromium, Total	3.7		MG/KG	2.2
		Copper, Total	12.6		MG/KG	5.4
		Iron, Total	9180		MG/KG	21.6
		Mercury, Total	0.11	u	MG/KG	0.11
		Potassium, Total	1080	u	MG/KG	1080
		Magnesium, Total	2370		MG/KG	1080
		Manganese, Total	177		MG/KG	3.2
		Sodium, Total	1080	u	MG/KG	1080
		Nickel, Total	8.6	u	MG/KG	8.6
		Lead, Total	4.9		MG/KG	0.65
		Antimony, Total	12.9	u	MG/KG	12.9
		Selenium, Total	1.1	u	MG/KG	1.1
		Thallium, Total	2.2	u	MG/KG	2.2
		Vanadium, Total	11.1		MG/KG	10.8
		Zinc, Total	22.3		MG/KG	4.3

9613441.1224 0000012

ROY F: WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9201L074

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-002	B018T4	Silver, Total	2.1	u	MG/KG	2.1
		Aluminum, Total	3030		MG/KG	42.9
		Arsenic, Total	2.1	u	MG/KG	2.1
		Barium, Total	46.1		MG/KG	42.9
		Beryllium, Total	1.1	u	MG/KG	1.1
		Calcium, Total	6780		MG/KG	1070
		Cadmium, Total	1.1	u	MG/KG	1.1
		Cobalt, Total	10.7	u	MG/KG	10.7
		Chromium, Total	4.5		MG/KG	2.1
		Copper, Total	10.6		MG/KG	5.4
		Iron, Total	9240		MG/KG	21.4
		Mercury, Total	0.11	u	MG/KG	0.11
		Potassium, Total	1070	u	MG/KG	1070
		Magnesium, Total	2560		MG/KG	1070
		Manganese, Total	176		MG/KG	3.2
		Sodium, Total	1070	u	MG/KG	1070
		Nickel, Total	8.6	u	MG/KG	8.6
		Lead, Total	4.9		MG/KG	0.64
		Antimony, Total	12.9	u	MG/KG	12.9
		Selenium, Total	1.1	u	MG/KG	1.1
		Thallium, Total	2.1	u	MG/KG	2.1
		Vanadium, Total	12.2		MG/KG	10.7
		Zinc, Total	29.1		MG/KG	4.3

9613441.1225 0000013

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9201L074

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-003	BO18T6	Silver, Total	2.2	u	MG/KG	2.2
		Aluminum, Total	3350		MG/KG	43.5
		Arsenic, Total	2.1	u	MG/KG	2.1
		Barium, Total	47.6		MG/KG	43.5
		Beryllium, Total	1.1	u	MG/KG	1.1
		Calcium, Total	7490		MG/KG	1090
		Cadmium, Total	1.1	u	MG/KG	1.1
		Cobalt, Total	10.9	u	MG/KG	10.9
		Chromium, Total	5.7		MG/KG	2.2
		Copper, Total	9.5		MG/KG	5.4
		Iron, Total	7610		MG/KG	21.7
		Mercury, Total	0.11	u	MG/KG	0.11
		Potassium, Total	1090	u	MG/KG	1090
		Magnesium, Total	2690		MG/KG	1090
		Manganese, Total	178		MG/KG	3.3
		Sodium, Total	1090	u	MG/KG	1090
		Nickel, Total	8.7	u	MG/KG	8.7
		Lead, Total	5.0		MG/KG	0.64
		Antimony, Total	13.0	u	MG/KG	13.0
		Selenium, Total	1.1	u	MG/KG	1.1
		Thallium, Total	2.1	u	MG/KG	2.1
		Vanadium, Total	12.1		MG/KG	10.9
		Zinc, Total	22.3		MG/KG	4.3

9613441.1226 0000014

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9201L074

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-004	B018T7	Silver, Total	2.0	u	MG/KG	2.0
		Aluminum, Total	158		MG/KG	39.7
		Arsenic, Total	2.0	u	MG/KG	2.0
		Barium, Total	39.7	u	MG/KG	39.7
		Beryllium, Total	0.99	u	MG/KG	0.99
		Calcium, Total	992	u	MG/KG	992
		Cadmium, Total	0.99	u	MG/KG	0.99
		Cobalt, Total	9.9	u	MG/KG	9.9
		Chromium, Total	2.0	u	MG/KG	2.0
		Copper, Total	5.0	u	MG/KG	5.0
		Iron, Total	704		MG/KG	19.8
		Mercury, Total	0.10	u	MG/KG	0.10
		Potassium, Total	992	u	MG/KG	992
		Magnesium, Total	992	u	MG/KG	992
		Manganese, Total	104		MG/KG	3.0
		Sodium, Total	992	u	MG/KG	992
		Nickel, Total	7.9	u	MG/KG	7.9
		Lead, Total	0.88		MG/KG	0.60
		Antimony, Total	11.9	u	MG/KG	11.9
		Selenium, Total	1.0	u	MG/KG	1.0
		Thallium, Total	2.0	u	MG/KG	2.0
		Vanadium, Total	9.9	u	MG/KG	9.9
		Zinc, Total	4.0	u	MG/KG	4.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9201L074

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	B018T8	Silver, Total	2.0	u	MG/KG	2.0
		Aluminum, Total	156		MG/KG	39.0
		Arsenic, Total	2.0	u	MG/KG	2.0
		Barium, Total	39.0	u	MG/KG	39.0
		Beryllium, Total	0.98	u	MG/KG	0.98
		Calcium, Total	976	u	MG/KG	976
		Cadmium, Total	0.98	u	MG/KG	0.98
		Cobalt, Total	9.8	u	MG/KG	9.8
		Chromium, Total	2.0	u	MG/KG	2.0
		Copper, Total	4.9	u	MG/KG	4.9
		Iron, Total	428		MG/KG	19.5
		Mercury, Total	0.10	u	MG/KG	0.10
		Potassium, Total	976	u	MG/KG	976
		Magnesium, Total	976	u	MG/KG	976
		Manganese, Total	14.6		MG/KG	2.9
		Sodium, Total	976	u	MG/KG	976
		Nickel, Total	7.8	u	MG/KG	7.8
		Lead, Total	1.0		MG/KG	0.59
		Antimony, Total	11.7	u	MG/KG	11.7
		Selenium, Total	0.98	u	MG/KG	0.98
		Thallium, Total	2.0	u	MG/KG	2.0
		Vanadium, Total	9.8	u	MG/KG	9.8
		Zinc, Total	3.9	u	MG/KG	3.9

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

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

WESTON BATCH #: 9201L074

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-014	B018T3	Silver, TCLP Leachate	10.0	u	UG/L	10.0
		Arsenic, TCLP Leachate	500	u	UG/L	500
		Barium, TCLP Leachate	666		UG/L	200
		Cadmium, TCLP Leachate	5.0	u	UG/L	5.0
		Chromium, TCLP Leachate	10.0	u	UG/L	10.0
		Mercury, TCLP Leachate	0.20	u	UG/L	0.20
		Lead, TCLP Leachate	90.0	u	UG/L	90.0
		Selenium, TCLP Leachate	500	u	UG/L	500

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ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9201L074

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-015	B018T4	Silver, TCLP Leachate	15.4		UG/L	10.0
		Arsenic, TCLP Leachate	500	u	UG/L	500
		Barium, TCLP Leachate	659		UG/L	200
		Cadmium, TCLP Leachate	5.0	u	UG/L	5.0
		Chromium, TCLP Leachate	10.0	u	UG/L	10.0
		Mercury, TCLP Leachate	0.20	u	UG/L	0.20
		Lead, TCLP Leachate	90.0	u	UG/L	90.0
		Selenium, TCLP Leachate	500	u	UG/L	500

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

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

WESTON BATCH #: 9201L074

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-016	B018T6	Silver, TCLP Leachate	10.0	u	UG/L	10.0
		Arsenic, TCLP Leachate	500	u	UG/L	500
		Barium, TCLP Leachate	666		UG/L	200
		Cadmium, TCLP Leachate	5.0	u	UG/L	5.0
		Chromium, TCLP Leachate	10.0	u	UG/L	10.0
		Mercury, TCLP Leachate	0.20	u	UG/L	0.20
		Lead, TCLP Leachate	90.0	u	UG/L	90.0
		Selenium, TCLP Leachate	500	u	UG/L	500

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

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

WESTON BATCH #: 9201L074

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-017	B018T7	Silver, TCLP Leachate	10.0	u	UG/L	10.0
		Arsenic, TCLP Leachate	500	u	UG/L	500
		Barium, TCLP Leachate	392		UG/L	200
		Cadmium, TCLP Leachate	5.0	u	UG/L	5.0
		Chromium, TCLP Leachate	10.0	u	UG/L	10.0
		Mercury, TCLP Leachate	0.20	u	UG/L	0.20
		Lead, TCLP Leachate	90.0	u	UG/L	90.0
		Selenium, TCLP Leachate	500	u	UG/L	500

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ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9201L074

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-018	B018T5	Silver, TCLP Leachate	10.0	u	UG/L	10.0
		Arsenic, TCLP Leachate	500	u	UG/L	500
		Barium, TCLP Leachate	556		UG/L	200
		Cadmium, TCLP Leachate	5.0	u	UG/L	5.0
		Chromium, TCLP Leachate	10.0	u	UG/L	10.0
		Mercury, TCLP Leachate	0.20	u	UG/L	0.20
		Lead, TCLP Leachate	90.0	u	UG/L	90.0
		Selenium, TCLP Leachate	500	u	UG/L	500

9613441.1233 0000021

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/92

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9201L074

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-019	B018T8	Silver, TCLP Leachate	10.0	u	UG/L	10.0
		Arsenic, TCLP Leachate	500	u	UG/L	500
		Barium, TCLP Leachate	332		UG/L	200
		Cadmium, TCLP Leachate	5.0	u	UG/L	5.0
		Chromium, TCLP Leachate	10.0	u	UG/L	10.0
		Mercury, TCLP Leachate	0.20	u	UG/L	0.20
		Lead, TCLP Leachate	90.0	u	UG/L	90.0
		Selenium, TCLP Leachate	500	u	UG/L	500

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

B018T3

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP074

Matrix (soil/water): SOIL Lab Sample ID: 920107401

Level (low/med): LOW Date Received: 1/18/92

% Solids: 92.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2770.00			P
7440-36-0	Antimony	4.96	U	N	P
7440-38-2	Arsenic	1.20	B		F
7440-39-3	Barium	45.80			P
7440-41-7	Beryllium	.22	U		P
7440-43-9	Cadmium	.65	U		P
7440-70-2	Calcium	7610.00			P
7440-47-3	Chromium	3.70			P
7440-48-4	Cobalt	5.10	B		P
7440-50-8	Copper	12.60			P
7439-89-6	Iron	9180.00			P
7439-92-1	Lead	4.90			F
7439-95-4	Magnesium	2370.00			P
7439-96-5	Manganese	177.00			P
7439-97-6	Mercury	.05	U		CV
7440-02-0	Nickel	5.50	B		P
7440-09-7	Potassium	617.00	B		P
7782-49-2	Selenium	.43	U	NW	F
7440-22-4	Silver	1.30	B		P
7440-23-5	Sodium	976.00	B		P
7440-28-0	Thallium	.43	U	W	F
7440-62-2	Vanadium	11.10			P
7440-66-6	Zinc	22.30			P
	Cyanide	1.08	U		C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

BO18T4

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP074

Matrix (soil/water): SOIL Lab Sample ID: 920107402

Level (low/med): LOW Date Received: 1/18/92

% Solids: 92.9

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3030.00			P
7440-36-0	Antimony	4.93	U	N	P
7440-38-2	Arsenic	1.30	B		F
7440-39-3	Barium	46.10			P
7440-41-7	Beryllium	.21	U		P
7440-43-9	Cadmium	.64	U		P
7440-70-2	Calcium	6780.00			P
7440-47-3	Chromium	4.50			P
7440-48-4	Cobalt	6.00	B		P
7440-50-8	Copper	10.60			P
7439-89-6	Iron	9240.00			P
7439-92-1	Lead	4.90			F
7439-95-4	Magnesium	2560.00			P
7439-96-5	Manganese	176.00			P
7439-97-6	Mercury	.07	B		CV
7440-02-0	Nickel	6.50	B		P
7440-09-7	Potassium	795.00	B		P
7782-49-2	Selenium	.43	U	NW	F
7440-22-4	Silver	1.20	B		P
7440-23-5	Sodium	978.00	B		P
7440-28-0	Thallium	.43	U	W	F
7440-62-2	Vanadium	12.20			P
7440-66-6	Zinc	29.10			P
	Cyanide	1.08	U		C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

BO18T6

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP074

Matrix (soil/water): SOIL Lab Sample ID: 920107403

Level (low/med): LOW Date Received: 1/18/92

% Solids: 91.6

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3350.00			P
7440-36-0	Antimony	5.00	U	N	P
7440-38-2	Arsenic	1.60	B		F
7440-39-3	Barium	47.60			P
7440-41-7	Beryllium	.22	U		P
7440-43-9	Cadmium	.65	U		P
7440-70-2	Calcium	7490.00			P
7440-47-3	Chromium	5.70			P
7440-48-4	Cobalt	4.60	B		P
7440-50-8	Copper	9.50			P
7439-89-6	Iron	7610.00			P
7439-92-1	Lead	5.00			F
7439-95-4	Magnesium	2690.00			P
7439-96-5	Manganese	178.00			P
7439-97-6	Mercury	.06	B		CV
7440-02-0	Nickel	6.60	B		P
7440-09-7	Potassium	796.00	B		P
7782-49-2	Selenium	.42	U	NW	F
7440-22-4	Silver	.87	U		P
7440-23-5	Sodium	550.00	B		P
7440-28-0	Thallium	.42	U	W	F
7440-62-2	Vanadium	12.10			P
7440-66-6	Zinc	22.30			P
	Cyanide	1.09	U		C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B018T7

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP074

Matrix (soil/water): SOIL Lab Sample ID: 920107404

Level (low/med): LOW Date Received: 1/18/92

% Solids: 99.8

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	158.00			P
7440-36-0	Antimony	4.56	U	N	P
7440-38-2	Arsenic	.40	U		F
7440-39-3	Barium	26.90	B		P
7440-41-7	Beryllium	.20	U		P
7440-43-9	Cadmium	.59	U		P
7440-70-2	Calcium	110.00	B		P
7440-47-3	Chromium	1.19	U		P
7440-48-4	Cobalt	.99	U		P
7440-50-8	Copper	1.19	U		P
7439-89-6	Iron	704.00			P
7439-92-1	Lead	.88			F
7439-95-4	Magnesium	43.90	B		P
7439-96-5	Manganese	104.00			P
7439-97-6	Mercury	.05	B		CV
7440-02-0	Nickel	3.57	U		P
7440-09-7	Potassium	146.00	U		P
7782-49-2	Selenium	.40	U	N	F
7440-22-4	Silver	.79	U		P
7440-23-5	Sodium	127.00	U		P
7440-28-0	Thallium	.40	U		F
7440-62-2	Vanadium	.99	U		P
7440-66-6	Zinc	2.80	B		P
	Cyanide	1.00	U		C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

B018T8

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP074

Matrix (soil/water): SOIL Lab Sample ID: 920107405

Level (low/med): LOW Date Received: 1/18/92

% Solids: 99.7

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	156.00			P
7440-36-0	Antimony	4.49	U	N	P
7440-38-2	Arsenic	.39	U		F
7440-39-3	Barium	7.41	U		P
7440-41-7	Beryllium	.19	U		P
7440-43-9	Cadmium	.58	U		P
7440-70-2	Calcium	134.00	B		P
7440-47-3	Chromium	1.17	U		P
7440-48-4	Cobalt	.98	U		P
7440-50-8	Copper	1.17	U		P
7439-89-6	Iron	428.00			P
7439-92-1	Lead	1.00		W	F
7439-95-4	Magnesium	48.80	B		P
7439-96-5	Manganese	14.60			P
7439-97-6	Mercury	.05	U		CV
7440-02-0	Nickel	3.51	U		P
7440-09-7	Potassium	143.00	U		P
7782-49-2	Selenium	.39	U	NW	F
7440-22-4	Silver	.78	U		P
7440-23-5	Sodium	124.00	U		P
7440-28-0	Thallium	.39	U		F
7440-62-2	Vanadium	.98	U		P
7440-66-6	Zinc	2.30	B		P
	Cyanide	1.00	U		C

Color Before: BROWN Clarity Before: Texture: FINE

Color After: BROWN Clarity After: Artifacts:

Comments: