9613407.1408 0043372

9207L047-WES-742

START

RECORD COPY

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD **SAMPLE(S) RECEIVED:** 07-17-92
RFW #: 9207L047
W.O. #: 6168-02-01

INORGANIC NARRATIVE

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

1. Sample holding times as required by 40CFR136 were met with the exception of Total Organic Halides.

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

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

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

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

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

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

FEB 1996 RECEIVED LIMS

Jack R. Tuschall 09.17.92

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

SEP 1992 RECEIVED OSM DMO

ncc/i07-047

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ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 09/11/92

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

WESTON BATCH #: 9207L047

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	B06ZR3	Total Organic Carbon	0.68	MG/L	0.50
		Total Organic Halides	782	UG/L	25.0

WESTON Analytics Use Only

9207L047

Custody Transfer Record/Lab Work Request

WESTON

Client: Westinghouse Hanford

Est. Final Proj. Sampling Date:

Work Order #: 6168-02-01-0000

Project Contact/Phone #:

AD Project Manager: Josie King

QC: Clp Del: Clp TAT: 35 day

Date Rec'd: 7-17-92 Date Due: 8-21-92

Account #: WS-HANFORD

	VOA	BNA	Pest/PCB	Herb	Toc	Tox		Metal	CN							
Refrigerator #																
# Type Container – Liquid					1AG	1AG										
# Type Container – Solid																
Volume – Liquid					250	250										
Volume – Solid																
Preservatives					H_2SO_4	H_2SO_4										
ANALYSES REQUESTED →	ORGANIC							INORG								

WESTON Analytics Use Only

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

Lab ID	Client ID/Description	Matrix QC Chosen (✓) MS	MSD	Matrix	Date Collected	Time Collected	VOA	BNA	Pest/PCB	Herb	Toc (Fuct)	Tox (ETOX)		Metal	CN
001	B06ZR3			W	7-15-92						✓	✓			

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions: Project # 200AAms
① ms/msD Required

original (rewritten)

DATE/REVISIONS: RAD INFO TO FOLLOW
1
2
3
4
5
6

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
Fred X	[signature] OK 7-17-92	7-17-92	09:30		[signature] 7-17-92		

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

WESTON Analytics Use Only

Samples were:
1) Shipped ✓ or Hand Delivered
Airbill # 25 2103436Y
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

RFW 21-21-001/A-7/91 L372 L373 L375 L377 L378 Ref# none Cooler# Sms-157 381-596a

9613107.1410

9613407.1411

9207L047

Westinghouse Hanford Company	CHAIN OF CUSTODY	WESTON

Custody Form Initiator PH BUTCHER

Company Contact PH BUTCHER

Telephone (509)376-5045

Project Designation/Sampling Locations 200AAMS

Collection Date 7/13/92

Ice Chest No. 5ML-157

Field Logbook No. EFL-1033

Bill of Lading/Airbill No. 250986824-0

Offsite Property No. W92-0-0533-5

Method of Shipment EMERY

Shipped to TMA

Possible Sample Hazards/Remarks N/A

Sample Identification

B0GZR3

~~3, 40ml, aG, WATER, CLP VOA~~

~~3, 2L, aG, WATER, SEMI VOA, PCB/PEST~~

~~1, 1L, P, WATER, ICP/AA-METAL & Hg (HNO3) UNFILTERED~~

~~1, 1L, P, WATER, TDS, ANIONS, TSS, ALK~~

~~1, 1L, P, WATER, AMMONIA, COD (H2SO4)~~

1, 250ml, aG, WATER, TOC(INCLUDES BICARBONATE/CARBONATE (H2SO4)

1, 250ml, Gs, WATER, TOX (H2SO4)

~~1, 1L, P, WATER, GROSS ALPHA/BETA, GAMMA SCAN (HNO3)~~

~~B0G2R4~~

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

~~B0G2R5~~

~~3, 40ml aG, WATER, CLP VOA~~

[] Field Transfer of Custody

Chain of Possession

(Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
[illegible] K.D. Lee	B. WHITTEN	7-15-92 0:900
Relinquished by: B. WHITTEN	Received by: Kermit Blum	Date/Time: 7-16-92 1130
Relinquished by: Kermit Blum 7-16-92	Received by:	Date/Time:
Relinquished by: Fed-X	Received by: [illegible]	Date/Time: 7-17-92 09,30

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

9613407.1412

Westinghouse Hanford Company

SAMPLE ANALYSIS REQUEST Task #92-128

PART I: FIELD SECTION

or _____ Date Sampled 7-13-92 Time 0941 hours

ıny Contact PH Batcher Telephone (509) 376-5045

ıple ıber	Number and Type of Sample Containers	Type of Sample*	Analysis Requested
ZR3	~~3, 3G, 40ml~~	~~W~~	~~CLP VOA~~
	~~3, 6G, 2L~~	~~W~~	~~Semi-VOA, Pest/PCB~~
	~~1, P, 1L~~	~~W~~	~~ICP/AA Metals + Hg (HNO_3) Unfiltered~~
	~~3, P, 1L~~	~~W~~	~~TOS, BOD, Dissolved Oxygen, Anions, TSS, ALK~~
	~~1, P, 1L~~	~~W~~	~~Ammonia, COD (H_2SO_4)~~
	1, aG, 250ml	W	TOC (Includes Bicarbonate / Carbonate) (H_2SO_4)
	1, Gs, 250ml	W	TOX (H_2SO_4)
	~~1, P, 1L~~	~~W~~	~~Gross Alpha/Beta, Gamma Scan (HNO_3)~~
~~ZR4~~	~~1, P, 1L~~	~~W~~	~~ICP/AA Metals + Hg (HNO_3) Filtered~~
~~ZR5~~	~~3, 40ML, G~~	~~W~~	~~CLP-VOA~~
			BOC #: 250986824-0
			OPC #: W92-0-0533-5

Information** _____

al Handling and/or Storage _____

ole Sample Hazards _____

PART II: LABORATORY SECTION

ed by Kermit Blum Title Sample Control Supervisor Date 7-16-92

ysis Required _____

19

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MK-FERGUSON
A MORRISON KNUDSEN COMPANY

WELDON SPRING SITE REMEDIAL ACTION PROJECT
7295 HIGHWAY 94 SOUTH ST. CHARLES, MO 63304
TELEPHONE (314) 441-8086 TELEX (314) 447-0803

ENVIRONMENTAL SAMPLE CHAIN-OF-CUSTODY FORM

AP CONTACT: Waunda Burhans REQUEST NO: 145

E EXT.: 3503 LABORATORY RECEIVING SAMPLES: Weston

SAMPLE NUMBER	NO. OF CONT.	DATE SAMPLED	MATRIX	PARAMETERS	PRESERVATIVES	ARCHIVE (y/n)
W-2004-S292	1.250 ML	7-15-92	Water	Nitrate	HS204	N
" " "	1.500 ML			Sulfate & Alkalinity	ICE	
W-2005-S292	2 Same as above			Same as above		
W-2005-S292-MD	2 Same					
W-2022-S292	2 Same					
W-2029-S292	2 Same					
W-2029-S292-FB	2 Same					
W-2014-S292	2 Same	7-16-92				
W-2017-S292	2 Same					
GW-2034-S292	2 Same					
GW-2005-S292-MS	1.250 ML	7-15-92	water	Nitrate	HS204	
" " "	1.500 ML			Sulfate	ICE	N
f MS & MD Samples have not been spiked.						

ER'S SIGNATURE: Terry Caldwell CHECKED BY: [signature]

INQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR TRANSFER	SEAL INTACT (YES/NO)	COOLER TEMP.
y Caldwell	[signature]	7-16-92	1450	Packaging		
[signature]	Fed Ex 600 [illegible]	7-16-92	1630	Shipment		
[illegible]	[signature]	7-17-92	[illegible]	Receipt at Lab	yes	5°C

NICAL REVIEWER:

2C

FEDERAL EXPRESS

[redacted]

QUESTIONS? CALL 800-238-5355 TOLL FREE

AIRBILL
PACKAGE
TRACKING NUMBER

2521034364

9207L047

2 2 2521034364

RECIPIENT'S COPY

1 [redacted] Date

From (Your Name) Please Print | Your Phone Number (Very Important)

Company | Department/Floor No.

Street Address

City | State | ZIP Required

2 To (Recipient's Name) Please Print | Recipient's Phone Number (Very Important)

Company | Department/Floor No.

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes)

City | State | ZIP Required

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice)

3 PAYMENT 1 [✓] Bill Sender 2 [ ] Bill Recipient's FedEx Acct. No. 3 [ ] Bill Third Party FedEx Acct. No. 4 [ ] Bill Credit Card 5 [ ] Cash/Check [redacted]

H If HOLD FOR PICK UP Print FEDEX Address Here
Street Address
City | State | ZIP Required

4 SERVICES (Check only one box)

Priority Overnight	Standard Overnight
11 [✓] YOUR PACKAGING	51 [ ] YOUR PACKAGING
16 [ ] FEDEX LETTER *	56 [ ] FEDEX LETTER *
12 [ ] FEDEX PAK *	52 [ ] FEDEX PAK *
13 [ ] FEDEX BOX	53 [ ] FEDEX BOX
14 [ ] FEDEX TUBE	54 [ ] FEDEX TUBE
Economy Two Day	**Government Overnight**
30 [ ] ECONOMY	16 [ ] GOV'T LETTER
	11 [ ] GOV'T PACKAGE
Freight Service	
70 [ ] OVERNIGHT FREIGHT **	80 [ ] TWO DAY FREIGHT **

* Delivery commitment may be later in some areas
* Declared Value Limit $100
** Call for delivery schedule

5 DELIVERY AND SPECIAL HANDLING (Check services required)

1 [ ] HOLD FOR PICK UP
2 [✓] DELIVER WEEKDAY
3 DELIVER SATURDAY [ ]
4 [ ] DANGEROUS GOODS
5 [ ]
6 [ ] DRY ICE
7 [ ] OTHER SPECIAL SERVICE
8 [ ]
9 [ ]
10 [ ]
11 [ ]
12 [ ] HOLIDAY DELIVERY

6 PACKAGES | WEIGHT in Pounds Only | YOUR DECLARED VALUE

Total | Total | Total

Emp. No. | Date

[ ] Cash Received
[ ] Return Shipment
[ ] Third Party [ ] Chg. To Del. [ ] Chg. To Hold

Street Address

City | State | Zip

Received By
X [signature]

Date/Time Received: 7 17 94 | FedEx Employee Number: 0830

7 Release Signature

REVISION DATE 6/91
FORMAT #099
099

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21