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9207L202-WES-789

000001 11/05/92
RECORD COPY



ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD
RFW #: 9207L202
W.O. #: 6168-02-01

SAMPLE(S) RECEIVED: 07-29-92

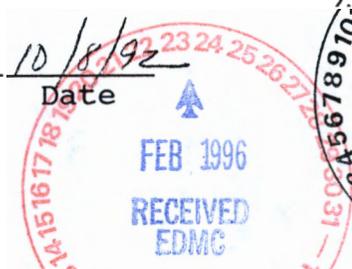
INORGANIC NARRATIVE

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

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

10/18/92
Date



ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/05/92

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

WESTON BATCH #: 9207L202

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
=====	=====	=====	=====	=====	=====
-001	B072M5	Total Organic Carbon	1.9	MG/L	0.50
		Total Organic Halides	50.0	u UG/L	50.0
-002	B072D0	Total Organic Carbon	2.0	MG/L	0.50
		Total Organic Halides	50.0	u UG/L	50.0
-003	B072K0	Total Organic Carbon	1.3	MG/L	0.50
		Total Organic Halides	11.7	UG/L	10.0

Westinghouse Hanford Company	CHAIN OF CUSTODY	<i>92076 202</i>
Custody Form Initiator PH BUTCHER		
Company Contact PH BUTCHER		Telephone (509)376-5045
Project Designation/Sampling Locations 100-HR-3		Collection Date <i>7/27/92</i>
Ice Chest No. <i>Trail dog</i>		Field Logbook No. <i>EPC-0057</i>
Bill of Lading/Airbill No. <i>250996942-5</i>		Offsite Property No. <i>W92-0-0577-38</i>
Method of Shipment EMERY		
Shipped to WESTON		
Possible Sample Hazards/Remarks N/A		

Sample Identification

BO *72DO*
 1, 125ml, aG, WATER, TOC (H2SO4)
 1, 250ml, aG, WATER, TOX (H2SO4)

<input type="checkbox"/> Field Transfer of Custody	Chain of Possession	(Sign and Print Names)
Relinquished by: <i>Keith Lee</i>	Received by: <i>K. Trapp / L. Trapp</i>	Date/Time: <i>7/28/92 1000</i>
Relinquished by: <i>K. Trapp / L. Trapp</i>	Received by:	Date/Time:
Relinquished by: <i>[Signature]</i>	Received by: <i>[Signature]</i>	Date/Time: <i>2-29-92 15:30</i>
Relinquished by:	Received by:	Date/Time:
Final Sample Disposition		
Disposal Method:	Disposed by:	Date/Time:
Comments:		

FORM OF PAYMENT

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UNITED STATES / CANADA
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 Second Day Saturday Delivery

INTERNATIONAL
 Express
 Preferred
 Standard Delivery



Shipper's Account Number
850281585

Date: 07-28-92
 Origin: PSC
 Shipment Number: **250986942**

From: WESTINGHOUSE SHIPPING DEPT (509) 376-6665

To: JOSIE KING

U.S. DEPARTMENT OF ENERGY C/O WESTINGHOUSE HANFORD

RF WESTON INC

BLDG 1188
 2335 STEVENS DRIVE

208 WELSH POOL ROAD

COHLAND WA

LIONVILLE PA

Customer's Reference Numbers
 W81231 PB3DA W92-0-0533 #38 99352

Consignee's Account Number
E 19341

Description	Pcs	Dimensions (L x W x H)	Total Pieces	Total Weight (in Lbs.)
1 COOLER ID: BULLDOG WATER SAMPLES W92-0-0533 #38	1		1	57

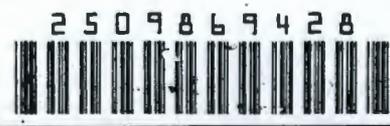
FOR INFORMATION OR RATES
 CALL 1-800 44 EMERY
 (1-800-443-6379)

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 Urgent Pack 12X15



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Third Party Account Number mandatory for Third Party Billing: **E**

International Customs Value International Insurance

Base Charge

Total Transportation Charges

Other Charges/Advance at Origin
 OC/AC- \$

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3-PHL-A

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ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/05/92

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

WESTON BATCH #: 9207L202

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	B072M5	Total Organic Carbon	1.9	MG/L	0.50
		Total Organic Halides	50.0(R)(u)	UG/L	50.0
-002	B072D0	Total Organic Carbon	2.0	MG/L	0.50
		Total Organic Halides	50.0(R)(u)	UG/L	50.0
-003	B072K0	Total Organic Carbon	1.3	MG/L	0.50
		Total Organic Halides	11.7(R)(u)	UG/L	10.0

Handwritten circled note:
2/5/92
7.11

"R" - TOX holding time grossly exceeded

"R" - TOX no instrument calibration provided

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 10/05/92

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WESTON BATCH #: 9207L202

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		Total Organic Halides	50.0 (R) 50.0	UG/L	50.0
-003	B072K0	Total Organic Carbon	1.3	MG/L	0.50
		Total Organic Halides	11.7 (R) 11.7	UG/L	10.0

12/31/92
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X01583
HR-3 3rd

FBI
6/2/95

J

3. INITIAL CALIBRATIONS

Were all instruments calibrated daily, each set-up time and were the proper number of standards used?

Yes No N/A

Are the correlation coefficients ≥ 0.995 ?

Yes No N/A

Was a balance check conducted prior to the TDS analysis?

Yes No N/A

Was the titrant normality checked?

Yes No N/A

ACTION: Qualify all data as unusable (R) if reported from an analysis in which the above criteria were not met.

4. INITIAL AND CONTINUING CALIBRATION VERIFICATION

Have ICV and CCV been analyzed at the proper frequency?

Yes No N/A

Are ICV and CCV percent recoveries within control?

Yes No N/A

Are there calculation errors?

Yes No N/A

ACTION: Qualify all affected data in accordance with the validation requirements.

5. LABORATORY BLANKS

Are target analytes present in the laboratory blanks?

Yes No N/A

ACTION: Qualify all associated sample results for any analyte < 5 times the amount in any laboratory blank as nondetected (U) and list the affected samples and analytes below.

6. FIELD BLANKS

Are target analytes present in the field blanks?

Yes No N/A

ACTION: Qualify all sample results for any analyte < 5 times the amount in any valid field blank as nondetected (U).

7. MATRIX SPIKE SAMPLE ANALYSIS

Are spike recoveries within the acceptance limits?

Yes No N/A

ACTION: If the sample concentration exceeds the spike concentration by a factor of 4 or more, and spike recoveries are outside the acceptance limits, no qualification is necessary. If spike recovery is outside the control limits and the sample results are $> CRQL$, qualify the data as estimated (J). If the spike recovery is $< 30\%$ and the sample results are less than the IDL qualify the data as unusable (R).

8. LABORATORY CONTROL SAMPLE

Are percent recoveries within the acceptance limits?

Yes

No

 N/A

Are there calculation errors?

Yes

No

 N/A**ACTION:** Qualify the affected results according to the following requirements:

AQUEOUS LCS - Qualify as estimated (J), all sample results > IDL, for which the LCS %R falls within the range 50-79% or > 120%. Qualify as estimated (UJ), all sample results < IDL, for which the LCS falls within the range of 50-79%. Qualify as unusable (R) all sample results, for which the LCS %R < 50%.

SOLID LCS - Qualify as estimated (J), all sample results > IDL for which the LCS %R is outside the established control limits. Qualify as estimated (UJ), all sample results < IDL for which the LCS %R are lower than the established control limits.

9. PERFORMANCE AUDIT ANALYSES

Are the performance audit sample results within the acceptance limits?

Yes

No

 N/A**ACTION:** Note the results of the performance audit samples in the validation narrative.**10. DUPLICATE SAMPLE ANALYSIS**

Are RPD values within the acceptance limits?

 Yes

No

N/A

Action: Qualify the results for all associated samples of the same matrix as estimated (J) if the RPD falls outside the acceptance limits.

11. FIELD DUPLICATE SAMPLES

Do RPD values exceed the acceptance limits?

Yes

No

 N/A**ACTION:** Note the results of the field duplicate samples in the validation narrative.**12. FIELD SPLIT SAMPLES**

Do RPD values exceed the acceptance limits?

Yes

No

 N/A**ACTION:** Note the results of the field split samples in the validation narrative.

13. ANALYTE QUANTITATION AND DETECTION LIMITS

Have results been reported and calculated correctly?

 Yes No N/A

Are instrument detection limits below the CRDL?

 Yes No N/A

Action: If analyte quantitation is in error, contact the laboratory for explanation. If errors or deficiencies can not be resolved with the laboratory, qualify associated data as unusable (R).

14. OVERALL ASSESSMENT AND SUMMARY

Has the laboratory conducted the analysis in accordance with the analytical SOW?

 Yes No N/A

Were project specific data quality objectives met for this analysis?

 Yes No N/A

ACTION: Summarize all the data qualifications and complete the data validation narrative as specified in Section 10.0 of the data validation requirements.

COMMENTS (attach additional sheets as necessary): _____

Initial Calibration results for TOX have not been included in the data package