

START

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9110L075-WES-181

0044556

WESTON

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD
RFW #: 9110L075
W.O. #: 6168-02-01-0000

SAMPLES RECEIVED: 10-19-91

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 for water samples.
2. All preparation blank results were below the required detection limit.
3. All calibration verification checks were within the required control limits of 90-110%. Calibration verification is performed using independent standards.
4. 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.
5. Replicate results are summarized on the Inorganic Precision Report contained within this document. All results were within the 20% RPD guidance limit.
6. 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).

Jack R. Tuschall

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

11.15.91
Date



ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 11/14/91

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9110L075

WORK ORDER: 6168-02-01-0000

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
=====	=====	=====	=====	=====	=====
-001	BO15D2	Total Organic Carbon	0.75	MG/L	0.50
-002	BO15D3	Total Organic Carbon	1.4	MG/L	0.50

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ROY F. WESTON INC.

INORGANICS PRECISION REPORT 11/14/91

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

WESTON BATCH #: 9110L075

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-001REP	BO15D2	Total Organic Carbon	0.75	0.75	0.00

OSM RCRA DATA ASSESSMENT

DATE 1/29/92 *AMB*
 REVIEWED BY Mark A. Beck
 LABORATORY Weston
 CASE # 100 Area Springs
 SDG # RFA # 9110L075

SAMPLES/MATRIX	<u>BO15D2</u>	<u>BO15B3</u>

DATA ASSESSMENT SUMMARY

QUALITY CONTROL CHECK	ANALYSIS	TOTAL ORGANIC CARBON		
1. <u>Holding times</u>		<u>0</u>		
2. <u>Matrix spikes</u>		<u>0</u>		
3. <u>Blanks</u>		<u>0</u>		
4. <u>Duplicate Analyses</u>		<u>0</u>		
5. <u>Calibrations</u>		<u>0</u>		
6. <u>Other</u>		<u>0</u>		
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				

0 = data had no problems
 X = minor problems, data may be qualified
 M = data qualified due to major problems/some data may be unusable

OVERALL ASSESSMENT: The data are acceptable without
qualifiers.

NOTES: _____

o Refer to the corresponding attachments for explanation of any problems.

RCRA QC

Name Mark A. Beck

Date 1/29/92 mat.

QC Check: Holding times

COMMENTS: Both samples met holding time requirements.

ACTION: none - none needed

<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>	<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>
_____ of _____					

_____ of _____

RCRA QC

Name Mark A. Beck

Date

1/29/2000

QC Check: Matrix Spikes

COMMENTS: Appropriate matrix spikes were performed and met acceptance criteria for recovery.

ACTION: none - none needed

<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>	<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>
_____ of _____					

RCRA QC

Name Mark A. Beck

Date 11/29/02 MAB

QC Check: Blank

COMMENTS: Appropriate blanks were run and all
blanks were free of contamination.

ACTION: none - none needed

<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>	<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>
 					

RCRA QC

Name Mark A. Beck

Date

1/29/92 mlk

QC Check: Duplicate Analyses

COMMENTS: Duplicate analyses were performed on both a sample and as blank spikes. Recoveries and % differences were acceptable for all duplicate analyses.

ACTION: none, none required

<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>	<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>

RCRA QC

Name Mark A. Beck

Date

1/29/92 MAR

QC Check: Calibration

COMMENTS: Appropriate initial (start-up) calibration was performed. ICV and CCV (done as blank spikes) all had acceptable recoveries, and they were performed at the appropriate points in the analytical sequence.

ACTION: none - none required.

<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>	<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>
of					

of

RCRA QC

Name Mark A. Beck

Date 1/29/92 mab.

QC Check: Other

COMMENTS: none

ACTION: none

<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>	<u>sample #</u>	<u>constituent</u>	<u>value/qual</u>
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of



ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD
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SAMPLES RECEIVED: 10-19-91

INORGANIC NARRATIVE

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

11.15.91
Date



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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 11/14/91

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

WESTON BATCH #: 9110L075

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
-001	BO15D2	Total Organic Carbon	0.75	MG/L	0.50
-002	BO15D3	Total Organic Carbon	1.4	MG/L	0.50

1/29/92
MAH

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ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 11/14/91

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

WESTON BATCH #: 9110L075

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT
BLANK10	91LTC146-MB1	Total Organic Carbon	0.50 u	MG/L	0.50
BLANK20	91LTC146-MB2	Total Organic Carbon	0.50 u	MG/L	0.50
BLANK30	91LTC146-MB3	Total Organic Carbon	0.50 u	MG/L	0.50

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ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 11/14/91

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

WESTON BATCH #: 9110L075

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
-001	BO15D2	Total Organic Carbon	5.5	0.75	5.0	95.5
		Total Organic Carbon	5.3	0.75	5.0	91.5
BLANK10	91LTC146-MB1	Total Organic Carbon	4.7	0.50u	5.0	94.6
		Total Organic Carbon	4.7	0.50u	5.0	94.6
BLANK20	91LTC146-MB2	Total Organic Carbon	5.0	0.50u	5.0	101
BLANK30	91LTC146-MB3	Total Organic Carbon	4.7	0.50u	5.0	94.6

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ROY F. WESTON INC.

INORGANICS DUPLICATE SPIKE REPORT 11/14/91

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

WESTON BATCH #: 9110L075

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
-001	BO15D2	Total Organic Carbon	95.5	91.5	4.3
BLANK10	91LTC146-MB1	Total Organic Carbon	94.6	94.6	0.00

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ROY F. WESTON INC.

INORGANICS PRECISION REPORT 11/14/91

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

WESTON BATCH #: 9110L075

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	& DIFF
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-001REP	BO15D2	Total Organic Carbon	0.75	0.75	0.00

Custody Form Initiator Richard Malwood

^{CSM}
376-1687

Company Contact Steve Weiss

Telephone 509-946-33

Project Designation/Sampling Locations CSM Project III

Collection Date 10/16/91

91-05E, / 100 K-2

Ice Chest No. IT-45 47 Rem 9/17/91

Field Logbook No. 199806.121.02

Bill of Lading/Airbill No. 247 425 3540

Offsite Property No. W91-0-0038

Method of Shipment _____

Shipped to Western Analytical 215 North Pool Rd, Lionville PA 19341

Possible Sample Hazards/Remarks None expected

Sample Identification

BC15D2 - 1x 250 ml glass H₂O

BC15D3 1x 250 ml glass H₂O

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Field Transfer of Custody		CHAIN OF POSSESSION	(Sign and Print Names)
Relinquished by: <u>Richard Malwood</u> <u>Richard Malwood</u>	Received by: <u>John Olson</u> <u>John Olson</u>	Date/Time: <u>10-18-91 / 0800</u>	
Relinquished by: <u>John Olson</u> <u>John Olson</u>	Received by: _____	Date/Time: _____	
Relinquished by: <u>Malwood</u> <u>Malwood</u>	Received by: <u>Malwood</u>	Date/Time: <u>10/19/91 3:00 PM</u>	
Relinquished by: _____	Received by: _____	Date/Time: _____	

Final Sample Disposition

Disposal Method: _____ Disposed by: _____ Date/Time: _____

Comments: _____

