

START

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9110L123-WES-219 2

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WESTON

ROY F. WESTON, INC.
Lionville Laboratory

CLIENT: WESTINGHOUSE HANFORD
RFW #: 9110L123
W.O. #: 6168-02-01-0000

SAMPLES RECEIVED: 10-24-91

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).

Samuel R. Boush 11.26.91.
 Jack R. Tuschall, Ph.D. Date
 Laboratory Manager
 Lionville Analytical Laboratory



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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 11/25/91

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

WESTON BATCH #: 9110L123

| SAMPLE | SITE ID | ANALYTE | RESULT | UNITS | REPORTING LIMIT |
|--------|---------|----------------------|--------|-------|--------------------|
| -001 | BO15D6 | Total Organic Carbon | 0.83 | MG/L | 0.50 |
| -002 | BO15D7 | Total Organic Carbon | 1.2 | MG/L | 0.50 |

CAL STD ID: FISHER

PREP BATCH: 91LTC149

ICV/CCV STD ID: ALDRICH

WORKSHEET: TOC1158

ANALYST: J.P. Perrone

METHOD: SM 505.B ^{11/18/91}

DATE: 11/18/91

LOGBOOK #: 2345

START TIME: 9:15 END TIME: _____

| RFW # | QC INFO | PH <2 | SAMPLE ID | DILN FACTOR | INST READING | MG/L | % REC. |
|----------------------------------|---------|-------|--------------|-------------|--------------------------|---------|--------|
| blank | | | | | 0.3 | | |
| 0.5 mg/L | | | | | 0.8 | | |
| 1.0 | | | | | 1.3 | | |
| 5.0 | | | | | 4.8 | | |
| 10.0 | | | | | 25.4 ^{11/18/91} | 10.1 | |
| 25.0 | | | | | 25.4 | | |
| blank | | | | | 0.3 | <0.5 | |
| ICV | 5 ppm | | | | 4.9 | 4.7 | |
| ICV dup | ↓ | | | | 5.0 | 4.8 | |
| 9110L110-001 ^{11/18/91} | spec | ✓ | 21-8077-W001 | | 2.4 | 2.2 | |
| 110-004 | | ✓ | 20-8082-D201 | | 0.7 | 0.5 | |
| 110-006 | | ✓ | 21-8078-W001 | | 2.1 | 1.9 | |
| 9110L123-001 (CLP) | | ✓ | B015D6 | | 1.0 | 0.8 | |
| 123-001 | dup | ✓ | B015D7 | | 1.1 | 0.9 | |
| 123-001/spk | 5 ppm | ✓ | B015D6 | | 5.7 | 5.7 5.8 | |
| 123-001/spk dup | 5 ppm | ✓ | ↓ | | 5.9 | 5.7 | |
| 123-002 | | ✓ | B015D7 | | 1.4 | 1.2 | |
| 9110L143-001 (CLP) | | ✓ | B019T3 | | 0.4 | <0.5 | |
| 143-001 dup | | ✓ | B019T3 | | 5.0 ^{11/20/91} | <0.5 | |
| 143-001/spk | | ✓ | ↓ | | 5.3 | 5.1 | |
| 143-001/spk dup | | ✓ | ↓ | | 5.2 | 5.0 | |
| 143-004 | | ✓ | B019F7 | | 0.5 | <0.5 | |
| 9110L120-001 (CLP) | | ✓ | B019Z3 | | 0.3 | <0.5 | |
| 120-001 dup | | ✓ | B019Z3 | | 0.3 | <0.5 | |

REVIEWED BY/DATE: J.P. Perrone 11/24/91

Custody Form Initiator Richard Mahood

RFW 9110L 123

Company Contact Steve Weiss

Telephone 509 376 1683

Project Designation/Sampling Location OSM Project No. 91-058

Collection Date 10/21/91

100 H-5 location east of retention basins.

Ice Chest No. IT-2

Field Logbook No. 199806.12/02

Bill of Lading/Airbill No. 247425 3628

Offsite Property No. W92-G-0033 #3

Method of Shipment _____

Shipped to Weston Analytical.

Possible Sample Hazards/Remarks None expected

9110L123

Sample Identification

BO15D6 1x250ml GS H2O spring sample (TOC)

BO15D7 1x250ml GS H2O river sample (TOC)

~~_____

_____~~

Field Transfer of Custody CHAIN OF POSSESSION (Sign and Print Names)

Relinquished by: Richard Mahood Received by: John Olson Date/Time: 10/23/91 0805
Richard Mahood John Olson

Relinquished by: _____ Received by: _____ Date/Time: _____
John Olson

Relinquished by: Emory Received by: P. Feigh Date/Time: 10/24/91 1:30 PM
Emory P. Feigh

Relinquished by: _____ Received by: _____ Date/Time: _____

Final Sample Disposition

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

Comments: _____

OSM RCRA DATA ASSESSMENT

DATE 1/29/92
 REVIEWED BY Mark A. Beck
 LABORATORY Weston
 CASE # 100 Area Springs
 SDG # RFN# 9110L123

SAMPLES/MATRIX Both water
BO15D6 BO15D7

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>Duplicates</u> | | <u>0</u> | | |
| 4. <u>Blanks</u> | | <u>0</u> | | |
| 5. <u>Calibration</u> | | <u>0</u> | | |
| 6. <u>Other</u> | | <u>0</u> | | |
| 7. _____ | | | | |
| 8. _____ | | | | |
| 9. _____ | | | | |
| 10. _____ | | | | |

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.

NOTES: _____

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

RCRA QC

Name Mark A. Beck

Date

1/29/92 mgb

QC Check:

Holding Times

COMMENTS:

Holding time requirements were met for these samples.

ACTION:

none - none needed.

sample # constituent value/qual

sample # constituent value/qual

RCRA QC

Name Mark A. Beck

Date

1/29/92 MLP

QC Check: Matrix Spikes

COMMENTS: matrix spikes were performed and had acceptable rec recoverie.

ACTION: none - none needed

sample # constituent value/qual

sample # constituent value/qual

RCRA QC

Name Mark A. Beck Date 1/29/92 mwb.

QC Check: Duplicates

COMMENTS: Duplicate analyses were run as both matrix
spike and blank duplicate. All duplicate
had acceptable % differences.

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 mab

QC Check: Blanks

COMMENTS: All blanks were free of contamination.

ACTION: none - none needed

sample # constituent value/qual

sample # constituent value/qual

RCRA QC

Name Mark A. Beck

Date

1/29/92 msk

QC Check: Calibration

COMMENTS: Set-up, ICV and CCV were performed appropriately. all ICV, CCV had acceptable recoveries.

ACTION: none - none needed

sample # constituent value/qual

sample # constituent value/qual

RCRA QC

Name Mark A. Beck Date 1/29/92 mlk

QC Check: Other

COMMENTS: none,

ACTION: none - none needed.

sample # constituent value/qual | sample # constituent value/qual

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1/29/92
mab