START 3507.0722

9401L391-WES-1473

0045878

ROY F. WESTON, INC.
LIONVILLE ANALYTICAL LABORATORY
ANALYTICAL CASE NARRATIVE

Client : WESTINGHOUSE HANFORD
RFW# : 9401L365

W.O. #: 06168-002-001-9999-00
Date Received: 01-24-94

METALS

1. This narrative covers the analysis of six (6) water samples.

2. The samples were prepared and analyzed in accordance with the following protocols: CLP SOW.

3. ICVs, CCVs, and LCSs stock standards were purchased from Inorganic Ventures Laboratory and High Purity.

4. All analyses were performed within the required holding times.

5. All Initial and Continuing Calibration Verifications (ICV/CCV's) were within control limits.

6. All Initial and Continuing Calibration Blanks (ICB/CCB's) were within control limits.

7. All Preparation/Method Blanks were below Reporting Limits.

8. All ICP Interference Check Samples (ICSA and ICSAB) were within control limits.

9. All Laboratory Control Samples (LCS) were within the 80-120% control limits.

10. All Serial Dilution percent differences were within USEPA SOW control limits with the following exceptions for sample 001:

Element	%Difference
Calcium	12.4
Magnesium	12.2
Sodium	14.0

0010

WESTON

11. All Matrix Spike recoveries were within the 75-125% control limits (exception allowed when sample concentration exceeds the spike added concentration by a factor of 4 or more).

    Matrix spike analyses are not required for Ca, Mg, Na, and K in waters.

12. All Duplicate analyses were within the 20% Relative Percent Difference (RPD) control limits for samples values greater than 5X Reporting Limit, or +/- the Reporting Limits for sample values less than 5X Reporting Limit.

13. Method of Standard Additions (MSA) analyses were not required.

14. 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.

15. 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).

16. The graphite furnace time that appears on form XIV is the time of the first injection. The time that appears on the data is the print time.

17. A discrepancy exists between raw data and Form XIVs analytical spikes recovery calculations performed for graphite furnace AA analytes. Instrument software calculates spike recoveries based on absolute values below the IDL for sample results. This is hard-coded by the vendor and is currently not correctable. CLP convention (SOW ILM02.0, Exhibit E, Section V, Item 6, page E-20) requires that when values fall below the IDL, the sample result is equal to zero (0) for the purposes of calculating the percent recovery. The Form XIVs contain the correct calculation.

J. Peter Hershey, Ph.D.
Laboratory Manager
Lionville Analytical Laboratory

3.2.94
Date

pas\m01-365clp

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/94

CLIENT: WESTINGHOUSE HANFORD WESTON BATCH #: 9401L365

WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-001	B09W66	Silver, Total	10.0	u	UG/L	10.0	1.0
		Aluminum, Total	200	u	UG/L	200	1.0
		Arsenic, Total	10.0	u	UG/L	10.0	1.0
		Barium, Total	200	u	UG/L	200	1.0
		Beryllium, Total	5.0	u	UG/L	5.0	1.0
		Calcium, Total	23500		UG/L	5000	1.0
		Cadmium, Total	5.0	u	UG/L	5.0	1.0
		Cobalt, Total	50.0	u	UG/L	50.0	1.0
		Chromium, Total	10.0	u	UG/L	10.0	1.0
		Copper, Total	25.0	u	UG/L	25.0	1.0
		Iron, Total	100	u	UG/L	100	1.0
		Mercury, Total	0.20	u	UG/L	0.20	1.0
		Potassium, Total	5000	u	UG/L	5000	1.0
		Magnesium, Total	13700		UG/L	5000	1.0
		Manganese, Total	15.0	u	UG/L	15.0	1.0
		Sodium, Total	26300		UG/L	5000	1.0
		Nickel, Total	40.0	u	UG/L	40.0	1.0
		Lead, Total	3.0	u	UG/L	3.0	1.0
		Antimony, Total	60.0	u	UG/L	60.0	1.0
		Selenium, Total	5.0	u	UG/L	5.0	1.0
		Thallium, Total	10.0	u	UG/L	10.0	1.0
		Vanadium, Total	50.0	u	UG/L	50.0	1.0
		Zinc, Total	20.0	u	UG/L	20.0	1.0

9713507.0725

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/94

CLIENT: WESTINGHOUSE HANFORD
WESTON BATCH #: 9401L365
WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-002	B09W67	Silver, Soluble	10.0	u	UG/L	10.0	1.0
		Aluminum, Soluble	200	u	UG/L	200	1.0
		Arsenic, Soluble	10.0	u	UG/L	10.0	1.0
		Barium, Soluble	200	u	UG/L	200	1.0
		Beryllium, Soluble	5.0	u	UG/L	5.0	1.0
		Calcium, Soluble	27500		UG/L	5000	1.0
		Cadmium, Soluble	5.0	u	UG/L	5.0	1.0
		Cobalt, Soluble	50.0	u	UG/L	50.0	1.0
		Chromium, Soluble	16.1		UG/L	10.0	1.0
		Copper, Soluble	25.0	u	UG/L	25.0	1.0
		Iron, Soluble	123		UG/L	100	1.0
		Mercury, Soluble	0.20	u	UG/L	0.20	1.0
		Potassium, Soluble	5540		UG/L	5000	1.0
		Magnesium, Soluble	15900		UG/L	5000	1.0
		Manganese, Soluble	22.9		UG/L	15.0	1.0
		Sodium, Soluble	31500		UG/L	5000	1.0
		Nickel, Soluble	40.0	u	UG/L	40.0	1.0
		Lead, Soluble	3.0	u	UG/L	3.0	1.0
		Antimony, Soluble	60.0	u	UG/L	60.0	1.0
		Selenium, Soluble	5.0	u	UG/L	5.0	1.0
		Thallium, Soluble	10.0	u	UG/L	10.0	1.0
		Vanadium, Soluble	50.0	u	UG/L	50.0	1.0
		Zinc, Soluble	20.0	u	UG/L	20.0	1.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/94

CLIENT: WESTINGHOUSE HANFORD WESTON BATCH #: 9401L365

WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-003	B09W64	Silver, Total	10.0	u	UG/L	10.0	1.0
		Aluminum, Total	200	u	UG/L	200	1.0
		Arsenic, Total	10.0	u	UG/L	10.0	1.0
		Barium, Total	200	u	UG/L	200	1.0
		Beryllium, Total	5.0	u	UG/L	5.0	1.0
		Calcium, Total	39300		UG/L	5000	1.0
		Cadmium, Total	5.0	u	UG/L	5.0	1.0
		Cobalt, Total	50.0	u	UG/L	50.0	1.0
		Chromium, Total	22.9		UG/L	10.0	1.0
		Copper, Total	25.0	u	UG/L	25.0	1.0
		Iron, Total	100	u	UG/L	100	1.0
		Mercury, Total	0.20	u	UG/L	0.20	1.0
		Potassium, Total	5000	u	UG/L	5000	1.0
		Magnesium, Total	5000	u	UG/L	5000	1.0
		Manganese, Total	15.0	u	UG/L	15.0	1.0
		Sodium, Total	5930		UG/L	5000	1.0
		Nickel, Total	40.0	u	UG/L	40.0	1.0
		Lead, Total	3.0	u	UG/L	3.0	1.0
		Antimony, Total	60.0	u	UG/L	60.0	1.0
		Selenium, Total	5.0	u	UG/L	5.0	1.0
		Thallium, Total	10.0	u	UG/L	10.0	1.0
		Vanadium, Total	50.0	u	UG/L	50.0	1.0
		Zinc, Total	20.0	u	UG/L	20.0	1.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/94

CLIENT: WESTINGHOUSE HANFORD WESTON BATCH #: 9401L365

WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-004	B09W65	Silver, Soluble	10.0	u	UG/L	10.0	1.0
		Aluminum, Soluble	200	u	UG/L	200	1.0
		Arsenic, Soluble	10.0	u	UG/L	10.0	1.0
		Barium, Soluble	200	u	UG/L	200	1.0
		Beryllium, Soluble	5.0	u	UG/L	5.0	1.0
		Calcium, Soluble	43200		UG/L	5000	1.0
		Cadmium, Soluble	5.0	u	UG/L	5.0	1.0
		Cobalt, Soluble	50.0	u	UG/L	50.0	1.0
		Chromium, Soluble	22.9		UG/L	10.0	1.0
		Copper, Soluble	25.0	u	UG/L	25.0	1.0
		Iron, Soluble	100	u	UG/L	100	1.0
		Mercury, Soluble	0.20	u	UG/L	0.20	1.0
		Potassium, Soluble	5000	u	UG/L	5000	1.0
		Magnesium, Soluble	5000	u	UG/L	5000	1.0
		Manganese, Soluble	15.0	u	UG/L	15.0	1.0
		Sodium, Soluble	6540		UG/L	5000	1.0
		Nickel, Soluble	40.0	u	UG/L	40.0	1.0
		Lead, Soluble	3.0	u	UG/L	3.0	1.0
		Antimony, Soluble	60.0	u	UG/L	60.0	1.0
		Selenium, Soluble	5.0	u	UG/L	5.0	1.0
		Thallium, Soluble	10.0	u	UG/L	10.0	1.0
		Vanadium, Soluble	50.0	u	UG/L	50.0	1.0
		Zinc, Soluble	20.0	u	UG/L	20.0	1.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/94

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9401L365

WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-005	B09W96	Silver, Total	10.0	u	UG/L	10.0	1.0
		Aluminum, Total	200	u	UG/L	200	1.0
		Arsenic, Total	10.0	u	UG/L	10.0	1.0
		Barium, Total	200	u	UG/L	200	1.0
		Beryllium, Total	5.0	u	UG/L	5.0	1.0
		Calcium, Total	5000	u	UG/L	5000	1.0
		Cadmium, Total	5.0	u	UG/L	5.0	1.0
		Cobalt, Total	50.0	u	UG/L	50.0	1.0
		Chromium, Total	10.0	u	UG/L	10.0	1.0
		Copper, Total	25.0	u	UG/L	25.0	1.0
		Iron, Total	100	u	UG/L	100	1.0
		Mercury, Total	0.20	u	UG/L	0.20	1.0
		Potassium, Total	5000	u	UG/L	5000	1.0
		Magnesium, Total	5000	u	UG/L	5000	1.0
		Manganese, Total	15.0	u	UG/L	15.0	1.0
		Sodium, Total	5000	u	UG/L	5000	1.0
		Nickel, Total	40.0	u	UG/L	40.0	1.0
		Lead, Total	3.0	u	UG/L	3.0	1.0
		Antimony, Total	60.0	u	UG/L	60.0	1.0
		Selenium, Total	5.0	u	UG/L	5.0	1.0
		Thallium, Total	10.0	u	UG/L	10.0	1.0
		Vanadium, Total	50.0	u	UG/L	50.0	1.0
		Zinc, Total	20.0	u	UG/L	20.0	1.0

ROY F. WESTON INC.

INORGANIC DATA SUMMARY REPORT 02/28/94

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9401L365

WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT	DILUTION FACTOR
-006	B09W97	Silver, Soluble	10.0	u	UG/L	10.0	1.0
		Aluminum, Soluble	200	u	UG/L	200	1.0
		Arsenic, Soluble	10.0	u	UG/L	10.0	1.0
		Barium, Soluble	200	u	UG/L	200	1.0
		Beryllium, Soluble	5.0	u	UG/L	5.0	1.0
		Calcium, Soluble	5000	u	UG/L	5000	1.0
		Cadmium, Soluble	5.0	u	UG/L	5.0	1.0
		Cobalt, Soluble	50.0	u	UG/L	50.0	1.0
		Chromium, Soluble	10.0	u	UG/L	10.0	1.0
		Copper, Soluble	25.0	u	UG/L	25.0	1.0
		Iron, Soluble	100	u	UG/L	100	1.0
		Mercury, Soluble	0.20	u	UG/L	0.20	1.0
		Potassium, Soluble	5000	u	UG/L	5000	1.0
		Magnesium, Soluble	5000	u	UG/L	5000	1.0
		Manganese, Soluble	15.0	u	UG/L	15.0	1.0
		Sodium, Soluble	5000	u	UG/L	5000	1.0
		Nickel, Soluble	40.0	u	UG/L	40.0	1.0
		Lead, Soluble	3.0	u	UG/L	3.0	1.0
		Antimony, Soluble	60.0	u	UG/L	60.0	1.0
		Selenium, Soluble	5.0	u	UG/L	5.0	1.0
		Thallium, Soluble	10.0	u	UG/L	10.0	1.0
		Vanadium, Soluble	50.0	u	UG/L	50.0	1.0
		Zinc, Soluble	20.0	u	UG/L	20.0	1.0

ROY F. WESTON INC.

INORGANIC PRECISION REPORT 02/28/94

CLIENT: WESTINGHOUSE HANFORD

WESTON BATCH #: 9401L365

WORK ORDER: 06168-002-001-9999-00

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	%RPD	DILUTION FACTOR (REP)
-001REP	B09W66	Silver, Total	10.0 u	10.0 u	NC	1.0
		Aluminum, Total	200 u	200 u	NC	1.0
		Arsenic, Total	10.0 u	10.0 u	NC	1.0
		Barium, Total	200 u	200 u	NC	1.0
		Beryllium, Total	5.0 u	5.0 u	NC	1.0
		Calcium, Total	23500	26000	10.1	1.0
		Cadmium, Total	5.0 u	5.0 u	NC	1.0
		Cobalt, Total	50.0 u	50.0 u	NC	1.0
		Chromium, Total	10.0 u	10.0 u	NC	1.0
		Copper, Total	25.0 u	25.0 u	NC	1.0
		Iron, Total	100 u	100 u	NC	1.0
		Mercury, Total	0.20u	0.20u	NC	1.0
		Potassium, Total	5000 u	5000 u	NC	1.0
		Magnesium, Total	13700	15200	10.5	1.0
		Manganese, Total	15.0 u	15.0 u	NC	1.0
		Sodium, Total	26300	29300	10.9	1.0
		Nickel, Total	40.0 u	40.0 u	NC	1.0
		Lead, Total	3.0 u	3.0 u	NC	1.0
		Antimony, Total	60.0 u	60.0 u	NC	1.0
		Selenium, Total	5.0 u	5.0 u	NC	1.0
		Thallium, Total	10.0 u	10.0 u	NC	1.0
		Vanadium, Total	50.0 u	50.0 u	NC	1.0
		Zinc, Total	20.0 u	20.0 u	NC	1.0

9713507.0731

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B09W66

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136501

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.00	U		P
7440-36-0	Antimony	27.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	65.10	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	23500.00		E	P
7440-47-3	Chromium	9.00	B		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	43.90	B		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	13700.00		E	P
7439-96-5	Manganese	3.00	U		P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	9.00	U		P
7440-09-7	Potassium	4710.00	B		P
7782-49-2	Selenium	2.40	B		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	26300.00		E	P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	14.20	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9713507.0732

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B09W67

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136502

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	24.40	B		P
7440-36-0	Antimony	27.00	U		P
7440-38-2	Arsenic	2.90	B		F
7440-39-3	Barium	79.10	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.60	B		P
7440-70-2	Calcium	27500.00		E	P
7440-47-3	Chromium	16.10			P
7440-48-4	Cobalt	6.70	B		P
7440-50-8	Copper	8.20	B		P
7439-89-6	Iron	123.00			P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	15900.00		E	P
7439-96-5	Manganese	22.90			P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	17.90	B		P
7440-09-7	Potassium	5540.00			P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	31500.00		E	P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	11.50	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9713507.0733

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B09W64

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136503

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.00	U		P
7440-36-0	Antimony	27.00	U		P
7440-38-2	Arsenic	2.20	B		F
7440-39-3	Barium	23.50	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	39300.00		E	P
7440-47-3	Chromium	22.90			P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	3.00	B		P
7439-89-6	Iron	39.30	B		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	4570.00	B	E	P
7439-96-5	Manganese	3.00	U		P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	9.00	U		P
7440-09-7	Potassium	2070.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	5930.00		E	P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	14.20	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9713507.0734

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

B09W65

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136504

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.00	U		P
7440-36-0	Antimony	27.00	U		P
7440-38-2	Arsenic	2.00			F
7440-39-3	Barium	27.60	B		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	43200.00		E	P
7440-47-3	Chromium	22.90			P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.60	B		P
7439-89-6	Iron	8.30	B		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	4980.00	B	E	P
7439-96-5	Manganese	3.00	U		P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	9.00	U		P
7440-09-7	Potassium	2370.00	B		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	6540.00		E	P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	14.20	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

mments:

9713507.0735

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B09W96

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136505

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.00	U		P
7440-36-0	Antimony	27.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	3.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	77.90	B	E	P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	11.60	B		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	47.00	U	E	P
7439-96-5	Manganese	3.00	U		P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	10.20	B		P
7440-09-7	Potassium	666.00	U		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	27.00	U	E	P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	17.70	B		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

B09W97

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136506

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	15.00	U		P
7440-36-0	Antimony	27.00	U		P
7440-38-2	Arsenic	2.00	U		F
7440-39-3	Barium	3.00	U		P
7440-41-7	Beryllium	1.00	U		P
7440-43-9	Cadmium	3.00	U		P
7440-70-2	Calcium	36.20	B	E	P
7440-47-3	Chromium	3.00	U		P
7440-48-4	Cobalt	2.00	U		P
7440-50-8	Copper	2.00	U		P
7439-89-6	Iron	7.60	B		P
7439-92-1	Lead	2.00	U		F
7439-95-4	Magnesium	47.00	U	E	P
7439-96-5	Manganese	3.00	U		P
7439-97-6	Mercury	.10	U		CV
7440-02-0	Nickel	9.00	U		P
7440-09-7	Potassium	666.00	U		P
7782-49-2	Selenium	2.00	U		F
7440-22-4	Silver	3.00	U		P
7440-23-5	Sodium	27.00	U	E	P
7440-28-0	Thallium	2.00	U		F
7440-62-2	Vanadium	4.00	U		P
7440-66-6	Zinc	3.00	U		P
	Cyanide				NR

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

WESTON Analytics Use Only
9401L365

Custody Transfer Record/Lab Work Request

WESTON

Page 1 of 10

Client: Westinghouse Hanford
Est. Final Proj. Sampling Date:
Work Order #: 06168-002-001-9999-00
Project Contact/Phone #:
AD Project Manager: Josie Edwards
QC: CLP Del: CLP TAT: 35 Days
Date Rec'd: 1/24/94 Date Due: 2/28/94
Account #: WS-HANFORD

Refrigerator #											3		3UB	3UB	3			0
#/Type Container	Liquid										TPL		TPL	TPL	TPL			0
	Solid																	
Volume	Liquid										4L		4L	8L	4L			
	Solid																	
Preservatives											HNO3		HNO3	—	HNO3			
ANALYSES REQUESTED →		ORGANIC									INORG							
		VOA	BNA	Pest/PCB	Herb						Metal	CN	RAD①	RAD②	metals			
		WESTON Analytics Use Only																
											MHELTO		ISUB		MHELSO			

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															
001	B09W66			W	1-15-94	~~0950~~ 1136	mbh 1/24/94							X		X	X				
002	B09W67			W		1136												X			
003	B09W64			W		0950								X		X	X				
004	B09W65			W		0950												X			
005	B09W96			W		0720								X		X	X				
006	B09W97			W		0720												X			

RAD① = Gross Alpha / Beta, U-Isotopic, Sr-90
RAD② = C-14, Tritium

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Special Instructions:

Temp = 4.9°C

SAF#94-025
Original Rewritten

DATE/REVISIONS:
1.
2.
3.
4.
5.
6.

Relinquished by	Received by	Date	Time	Relinquished by	Received by	Date	Time
EMERY	M. Harris	1/24/94	300 pm		mbh	1/25	1/24
	mbh	1/25/94					

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:

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

9713507.0737

9713507.0738

9401 L365

Item/Reason	Relinquished by	Received by	Date	Time
METALS 1-6	T Nott	Summers	2-10-94	1000
Metals return	[illegible]	Locked #3	2/17/94	0730.

0003

9713507.0739

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator K. Donnelson

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-KR-4

Collection Date 1-18-94

Ice Chest No. GWS127

Field Logbook No. EFL-1048

Bill of Lading/Airbill No. 251900846T

Offsite Property No. 21994-0-0090-2

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks NONE DETECTED

Sample Identification

B09W66

1; 1L; P; WATER; METALS-TAL (HNO3 to pH<2) UNFILTERED
1; 4L; P; WATER; GROSS ALPHA/BETA, U-ISOTOPIC, Sr-90 (HNO3 to pH<2)
1; 1L; and 1; 250mL; Gs; WATER; C-14, TRITIUM

B09W67

1; 1L; P; WATER; METALS-TAL (HNO3 to pH<2) FILTERED

Fridge #2C 1-18-94 KD 1300

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished By	Date	Time	Received By	Date	Time
[illegible]	1-19-94	0720	AJ Simpson AJSIMPSON	1/19/94	0720
AJ Simpson AJ SIMPSON	1/21/94	0730			
EMERY	1/24/94	30pm	M. [illegible]	1/24/94	30pm

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

Temp = 4.9°C

A-6000-407 (12/92) WEF061

0004

9713507.0740

Westinghouse Hanford Company	CHAIN OF CUSTODY

Custody Form Initiator K. Dannelson

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-KR-4

Collection Date 1-18-94

Ice Chest No. GWS127

Field Logbook No. EFL -1048

Bill of Lading/Airbill No. 251900846T

Offsite Property No. W94-0-0190-

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks NONE DETECTED

Sample Identification

B09W64

1; 1L; P; WATER; METALS-TAL (HNO3 to pH<2) UNFILTERED
1; 4L; P; WATER; GROSS ALPHA/BETA, U-ISOTOPIC, Sr-90 (HNO3 to pH<2)
1; 1L; and 1; 250mL; Gs; WATER; C-14, TRITIUM

B09W65

1; 1L; P; WATER; METALS-TAL (HNO3 to pH<2) FILTERED

Fridge #2C 1-18-94 KD 1300

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Names)

Relinquished By	Date	Time	Received By	Date	Time
Karl F. Dannelson	1-19-94	0720	AJ Simpson AJ SIMPSON	1/19/94	0720
AJ Simpson AJ SIMPSON	1/20/94	0731			
EMERY	1/24/94	3pm	M. Hennie	1/24/94	3pm

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

Temp = 4.9°C

A-6000-407 (12/92) WEF061

0005

9713507.0741

Westinghouse Hanford Company

CHAIN OF CUSTODY

Custody Form Initiator K. Donnelson

Company Contact PH BUTCHER

Telephone (509) 376-5045

Project Designation/Sampling Locations 100-KR-4

Collection Date 1-18-94

Ice Chest No. GWS127

Field Logbook No. EFL-1048

Bill of Lading/Airbill No. 251900846T

Offsite Property No. ~~25~~ AJS 1/20/94 W94-0-0190-2

Method of Shipment EMERY

Shipped to WESTON

Possible Sample Hazards/Remarks NONE DETECTED

Sample Identification

B09W96

1; 1L; P; WATER; METALS-TAL (HNO3 to pH<2) UNFILTERED
1; 4L; P; WATER; GROSS ALPHA/BETA, U-ISOTOPIC, Sr-90 (HNO3 to pH<2)
1; 1L; and 1; 250mL; Gs; WATER; C-14, TRITIUM

B09W97

1; 1L; P; WATER; METALS-TAL (HNO3 to pH<2) FILTERED

[] Field Transfer of Custody — Chain of Possession — (Sign and Print Name)

Relinquished By	Date	Time	Received By	Date	Time
Kurt E. Donnelson	1-19-94	0721	A.J. Simpson AJ SIMPSON	1/19/94	0722
A.J. Simpson AJ SIMPSON	1/20/94	0730			
EMERY	1/24/94	3:40pm	M. Henrie	1/24/94	3:40pm

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

Temp = 4.9°C

A-6000-407 (12/92) WEF061

9713507.0742

EMERY WORLDWIDE A CF Company

SIGNATURE AND TALLY RECORD

80029-46 (8/89) Litho USA

DATE: 01-20-94 SHIPMENT NO.: 251900846 T

SHIPPER: WESTINGHOUSE SHIPPING DEPT (509) 376-6665

REFERENCE NO.: W94-0-0190#21

SHIPPER NAME AND ADDRESS	CONSIGNEE NAME AND ADDRESS
WESTINGHOUSE SHIPPING DEPT (509) 376-6665 U.S. DEPARTMENT OF ENERGY C/O WESTINGHOUSE HANFORD COMPANY 2355 STEVENS DRIVE 1163 BUILDING PO BOX 1970 RICHLAND WA 99352	RF WESTON INC 256 WELSH POOL ROAD LIONVILLE PA 19341

Pieces	Weight	Description/Marks	Emery Authorization No.
1	97 LBS	COOLER ID: GWS 127 WATER 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.	SHIPPING DEPT CR NELSON WESTINGHOUSE HANFORD CO	RICHLAND WA		
2.				
3.	[illegible]	[illegible]	[illegible]	[illegible]
4.	[illegible]	[illegible]	[illegible]	[illegible]
5.				
6.	H Peters	WPAL	H Peters	0910 /24
7.	WD SNYDER	PHL	[illegible]	0915 / [illegible]
8.	P D [illegible]	[illegible]	[illegible]	[illegible]

SPECIAL HANDLING INSTRUCTIONS

CONSIGNEE COPY

0007

9713507.0743

FORM OF PAYMENT

Check ☐ GBL ☐ ☐ ☐

Bill to Shipper ☒ Bill to Consignee ☐ Third Party Billing ☐

EMERY WORLDWIDE

A CF Company

SERVICES **

UNITED STATES / CANADA: ☐ Same Day (Extra Charges) ☐ ☒ AM ☐ PM ☐ Second Day ☐ Saturday Delivery

INTERNATIONAL: Express ☐ Standard Plus ☐ Preferred ☐ Standard ☐ Business Documents ☐ Customs Clearance ☐ Delivery ☐

Shipper's Account Number: E 850281585

Date: 01-20-94 | Origin: PSC | Shipment Number: 251900846 T

From:
WESTINGHOUSE SHIPPING DEPT (509) 376-6665
U.S. DEPARTMENT OF ENERGY C/O
WESTINGHOUSE HANFORD
BLDG 1163
2355 STEVENS DRIVE
RICHLAND WA

Canada ☐ ☐

To
RF WESTON INC
RF WESTON INC
256 WELSH POOL ROAD
LIONVILLE PA USA

Hold for Pick Up ☐ Canada ☐ ☐

Tariff Dest. | Gateway

Check to Shipper $

EMERY WORLDWIDE will accept Consignee's check with all risks being assumed by Shipper, including but not limited to non-payment, fraud and misrepresentation.

Customer's Reference Numbers: W81232 PC4CA W94-0-0190#21 99352

E Consignee's Account Number: 19341-1313

PH BUTCHER

Description	Pc	L	W	H	Total Pieces	Total Weight (Pounds)
1 COOLER ID GWS 127 WATER SAMPLES	1	24	16	17	1	97

FOR INFORMATION OR RATES CALL 1-800 44 EMERY (1-800-443-63791)

Declared Value $

Remarks: OVERNIGHT DELIVERY SIGNATURE SECURITY SERVIC

Shipper's Signature X [signature] 1-20-94

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, described in the area to the right, apply

Mark if Emery Packaging is used: Urgent Letter 9X12 | Urgent Pack 12X15

International Shipments: Free Domicile ☐ | Commodity Code

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

International Customs Value | International Insurance

Base Charge

Total Transportation Charges | Other Charges/Advance at Origin ☐ OC/AO $

EMERY WORLDWIDE A CF Company

PCS / WGT 1 / 97 LB

16:39 21 JAN 94 PDX

251 900 846 T

19341-PA-PM

3PHL

SERVICE AM

0008

9713507.0744

U.S. EPA - CLP

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

B09W64

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136503

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	15.00	U		P	UJ
7440-36-0	Antimony	27.00	U		P	
7440-38-2	Arsenic	2.20	B		F	
7440-39-3	Barium	23.50	B		P	U
7440-41-7	Beryllium	1.00	U		P	
7440-43-9	Cadmium	3.00	U		P	
7440-70-2	Calcium	39300.00		E	P	J
7440-47-3	Chromium	22.90			P	
7440-48-4	Cobalt	2.00	U		P	
7440-50-8	Copper	3.00	B	E	P	U
7439-89-6	Iron	39.30	B		P	
7439-92-1	Lead	2.00	U		F	
7439-95-4	Magnesium	4570.00	B	E	P	J
7439-96-5	Manganese	3.00	U		P	
7439-97-6	Mercury	.10	U		CV	UJ
7440-02-0	Nickel	9.00	U		P	
7440-09-7	Potassium	2070.00	B		P	
7782-49-2	Selenium	2.00	U		F	
7440-22-4	Silver	3.00	U		P	
7440-23-5	Sodium	5930.00		E	P	J
7440-28-0	Thallium	2.00	U		F	
7440-62-2	Vanadium	4.00	U		P	UJ
7440-66-6	Zinc	14.20	B		P	U
	Cyanide				NR	

4/25/94

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9713507.0745

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B09W65

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136504

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	15.00	U		P	UJ
7440-36-0	Antimony	27.00	U		P	
7440-38-2	Arsenic	2.00			F	
7440-39-3	Barium	27.60	B		P	U
7440-41-7	Beryllium	1.00	U		P	
7440-43-9	Cadmium	3.00	U		P	
7440-70-2	Calcium	43200.00		E	P	J
7440-47-3	Chromium	22.90			P	
7440-48-4	Cobalt	2.00	U		P	
7440-50-8	Copper	2.60	B		P	U
7439-89-6	Iron	8.30	B		P	
7439-92-1	Lead	2.00	U		F	
7439-95-4	Magnesium	4980.00	B	E	P	J
7439-96-5	Manganese	3.00	U		P	
7439-97-6	Mercury	.10	U		CV	UJ
7440-02-0	Nickel	9.00	U		P	
7440-09-7	Potassium	2370.00	B		P	
7782-49-2	Selenium	2.00	U		F	
7440-22-4	Silver	3.00	U		P	
7440-23-5	Sodium	6540.00		E	P	J
7440-28-0	Thallium	2.00	U		F	
7440-62-2	Vanadium	4.00	U		P	UJ
7440-66-6	Zinc	14.20	B		P	U
	Cyanide				NR	

4/26/94 RM

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9713507.0746

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B09W66

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136501

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	15.00	U		P	UJ
7440-36-0	Antimony	27.00	U		P	
7440-38-2	Arsenic	2.00	U		F	
7440-39-3	Barium	65.10	B		P	
7440-41-7	Beryllium	1.00	U		P	
7440-43-9	Cadmium	3.00	U		P	
7440-70-2	Calcium	23500.00		E	P	J
7440-47-3	Chromium	9.00	B		P	
7440-48-4	Cobalt	2.00	U		P	
7440-50-8	Copper	2.00	U		P	
7439-89-6	Iron	43.90	B		P	
7439-92-1	Lead	2.00	U		F	
7439-95-4	Magnesium	13700.00		E	P	J
7439-96-5	Manganese	3.00	U		P	
7439-97-6	Mercury	.10	U		CV	UJ
7440-02-0	Nickel	9.00	U		P	
7440-09-7	Potassium	4710.00	B		P	
7782-49-2	Selenium	2.40	B		F	
7440-22-4	Silver	3.00	U		P	
7440-23-5	Sodium	26300.00		E	P	J
7440-28-0	Thallium	2.00	U		F	
7440-62-2	Vanadium	4.00	U		P	UJ
7440-66-6	Zinc	14.20	U		P	U
	Cyanide				NR	

4/25/94

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9713507.0747

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B09W67

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136502

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	24.40	B		P	J
7440-36-0	Antimony	27.00	U		P	
7440-38-2	Arsenic	2.90	B		F	
7440-39-3	Barium	79.10	B		P	
7440-41-7	Beryllium	1.00	U		P	
7440-43-9	Cadmium	3.60	B		P	
7440-70-2	Calcium	27500.00		E	P	J
7440-47-3	Chromium	16.10			P	
7440-48-4	Cobalt	6.70	B		P	U
7440-50-8	Copper	8.20	B		P	U
7439-89-6	Iron	123.00			P	
7439-92-1	Lead	2.00	U		F	
7439-95-4	Magnesium	15900.00		E	P	J
7439-96-5	Manganese	22.90			P	
7439-97-6	Mercury	.10	U		CV	UJ
7440-02-0	Nickel	17.90	B		P	
7440-09-7	Potassium	5540.00			P	
7782-49-2	Selenium	2.00	U		F	
7440-22-4	Silver	3.00	U		P	
7440-23-5	Sodium	31500.00		E	P	J
7440-28-0	Thallium	2.00	U		F	
7440-62-2	Vanadium	4.00	U		P	UJ
7440-66-6	Zinc	11.50	B		P	U
	Cyanide				NR	

4/25/94

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9713507.0748

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B09W96

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136505

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	15.00	~~U~~		P	UJ
7440-36-0	Antimony	27.00	U		P	
7440-38-2	Arsenic	2.00	U		F	
7440-39-3	Barium	3.00	U		P	
7440-41-7	Beryllium	1.00	U		P	
7440-43-9	Cadmium	3.00	U		P	
7440-70-2	Calcium	77.90	~~B~~	~~E~~	P	UJ
7440-47-3	Chromium	3.00	U		P	
7440-48-4	Cobalt	2.00	U		P	
7440-50-8	Copper	2.00	U		P	
7439-89-6	Iron	11.60	B		P	
7439-92-1	Lead	2.00	U		F	
7439-95-4	Magnesium	47.00	~~U~~	~~E~~	P	UJ
7439-96-5	Manganese	3.00	U		P	
7439-97-6	Mercury	.10	~~U~~		CV	UJ
7440-02-0	Nickel	10.20	B		P	
7440-09-7	Potassium	666.00	U		P	
7782-49-2	Selenium	2.00	U		F	
7440-22-4	Silver	3.00	U		P	
7440-23-5	Sodium	27.00	~~U~~	~~E~~	P	UJ
7440-28-0	Thallium	2.00	U		F	
7440-62-2	Vanadium	4.00	~~U~~		P	UJ
7440-66-6	Zinc	17.70	B		P	
	Cyanide				NR	

4/25/94 JM

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

9713507.0749

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

B09W97

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

Lab Code: WESTON Case No.: WEST SAS No.: SDG No.: CLP365

Matrix (soil/water): WATER Lab Sample ID: 940136506

Level (low/med): LOW Date Received: 1/24/94

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	15.00	U		P	UJ
7440-36-0	Antimony	27.00	U		P	
7440-38-2	Arsenic	2.00	U		F	
7440-39-3	Barium	3.00	U		P	
7440-41-7	Beryllium	1.00	U		P	
7440-43-9	Cadmium	3.00	U		P	
7440-70-2	Calcium	36.20	B	E	P	UJ
7440-47-3	Chromium	3.00	U		P	
7440-48-4	Cobalt	2.00	U		P	
7440-50-8	Copper	2.00	U		P	
7439-89-6	Iron	7.60	B		P	
7439-92-1	Lead	2.00	U		F	
7439-95-4	Magnesium	47.00	U	E	P	UJ
7439-96-5	Manganese	3.00	U		P	
7439-97-6	Mercury	.10	U		CV	UJ
7440-02-0	Nickel	9.00	U		P	
7440-09-7	Potassium	666.00	U		P	
7782-49-2	Selenium	2.00	U		F	
7440-22-4	Silver	3.00	U		P	
7440-23-5	Sodium	27.00	U	E	P	UJ
7440-28-0	Thallium	2.00	U		F	
7440-62-2	Vanadium	4.00	U		P	UJ
7440-66-6	Zinc	3.00	U		P	
	Cyanide				NR	

4/26/94 BN

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: