100288

WESTON WAY
WEST CHESTER, PA 19380
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22 AUGUST 1990

ROY F. WESTON, INC.
Client: STANDARD CHLORINE
RFW Sample No: 9008L253-001, 003, and 005
Client Sample ID:GW4-0-1-ORGA GW4-0-3-ORGA GW4-0-1-ORGA

METALS CASE NARRATIVE

1. Samples were received on 8/01/90. All required holding times were met.

2. ICVs, CCVs and LCSs stock standards were purchased from Inorganic Ventures Laboratory.

3. All ICV and CCV values were within control limits.

4. All ICB and CCB values were within control limits.

5. All preparation blank values were within control limits.

6. All LCS results were within the 80-120% control limits.

   Note: The USEPA has dropped control limits for antimony and silver due to documented difficulties in obtaining reliable results. WESTON Analytics has adopted the same policy.

7. All matrix spike recoveries were within the 75-125% control limits with the exception of Pb. All corresponding samples were flagged with an "N" according to CLP protocol.

8. All duplicate analyses were within the 20% RPD control limit with the exception of Zn. All corresponding samples were flagged with a "*" according to CLP protocol.

9. Pb sample results were calculated by the method of standard addition (MSA). All corresponding samples were flagged with an "S" according to CLP protocol.

WESTON

10. Samples were analyzed and reported by the 787 CLP protocol.

Leo E. O'Shea
Inorganic Section Manager
WESTON Analytical Laboratories

Date

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	GW4-0-1 OR6A	SILVER, TOTAL	10.0	u	UG/L	10.0
		ALUMINUM, TOTAL	200	u	UG/L	200
		ARSENIC, TOTAL	10.0	u	UG/L	10.0
		BARIUM, TOTAL	200	u	UG/L	200
		BERYLLIUM, TOTAL	5.0	u	UG/L	5.0
		CALCIUM, TOTAL	12800		UG/L	5000
		CADMIUM, TOTAL	5.0	u	UG/L	5.0
		COBALT, TOTAL	50.0	u	UG/L	50.0
		CHROMIUM, TOTAL	10.0	u	UG/L	10.0
		COPPER, TOTAL	25.0	u	UG/L	25.0
		IRON, TOTAL	30300		UG/L	100
		MERCURY, TOTAL	0.20	u	UG/L	0.20
		POTASSIUM, TOTAL	5000	u	UG/L	5000
		MAGNESIUM, TOTAL	5000	u	UG/L	5000
		MANGANESE, TOTAL	313		UG/L	15.0
		SODIUM, TOTAL	5000	u	UG/L	5000
		NICKEL, TOTAL	40.0	u	UG/L	40.0
		LEAD, TOTAL	13.9		UG/L	3.0
		ANTIMONY, TOTAL	60.0	u	UG/L	60.0
		SELENIUM, TOTAL	5.0	u	UG/L	5.0
		THALLIUM, TOTAL	10.0	u	UG/L	10.0
		VANADIUM, TOTAL	50.0	u	UG/L	50.0
		ZINC, TOTAL	67.4		UG/L	20.0

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-003	GW4-0-3 OR6A (FB)	SILVER, TOTAL	10.0	u	UG/L	10.0
		ALUMINUM, TOTAL	200	u	UG/L	200
		ARSENIC, TOTAL	10.0	u	UG/L	10.0
		BARIUM, TOTAL	200	u	UG/L	200
		BERYLLIUM, TOTAL	5.0	u	UG/L	5.0
		CALCIUM, TOTAL	5000	u	UG/L	5000
		CADMIUM, TOTAL	5.0	u	UG/L	5.0
		COBALT, TOTAL	50.0	u	UG/L	50.0
		CHROMIUM, TOTAL	10.0	u	UG/L	10.0
		COPPER, TOTAL	25.0	u	UG/L	25.0
		IRON, TOTAL	100	u	UG/L	100
		MERCURY, TOTAL	0.20	u	UG/L	0.20
		POTASSIUM, TOTAL	5000	u	UG/L	5000
		MAGNESIUM, TOTAL	5000	u	UG/L	5000
		MANGANESE, TOTAL	15.0	u	UG/L	15.0
		SODIUM, TOTAL	5000	u	UG/L	5000
		NICKEL, TOTAL	40.0	u	UG/L	40.0
		LEAD, TOTAL	3.0	u	UG/L	3.0
		ANTIMONY, TOTAL	60.0	u	UG/L	60.0
		SELENIUM, TOTAL	5.0	u	UG/L	[redacted]
		THALLIUM, TOTAL	10.0	u	UG/L	1[redacted]
		VANADIUM, TOTAL	50.0	u	UG/L	50.0
		ZINC, TOTAL	50.5		UG/L	20.0

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ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-005	GW4-0-1 OR6A	SILVER, SOLUBLE	10.0	u	UG/L	10.0
		ALUMINUM, SOLUBLE	200	u	UG/L	200
		ARSENIC, SOLUBLE	10.0	u	UG/L	10.0
		BARIUM, SOLUBLE	200	u	UG/L	200
		BERYLLIUM, SOLUBLE	5.0	u	UG/L	5.0
		CALCIUM, SOLUBLE	12800		UG/L	5000
		CADMIUM, SOLUBLE	5.0	u	UG/L	5.0
		COBALT, SOLUBLE	50.0	u	UG/L	50.0
		CHROMIUM, SOLUBLE	10.0	u	UG/L	10.0
		COPPER, SOLUBLE	25.0	u	UG/L	25.0
		IRON, SOLUBLE	20000		UG/L	100
		MERCURY, SOLUBLE	0.20	u	UG/L	0.20
		POTASSIUM, SOLUBLE	5000	u	UG/L	5000
		MAGNESIUM, SOLUBLE	5000	u	UG/L	5000
		MANGANESE, SOLUBLE	270		UG/L	15.0
		SODIUM, SOLUBLE	5000	u	UG/L	5000
		NICKEL, SOLUBLE	40.0	u	UG/L	40.0
		LEAD, SOLUBLE	3.0	u	UG/L	3.0
		ANTIMONY, SOLUBLE	60.0	u	UG/L	60.0
		SELENIUM, SOLUBLE	5.0	u	UG/L	5.0
		THALLIUM, SOLUBLE	10.0	u	UG/L	10.0
		VANADIUM, SOLUBLE	50.0	u	UG/L	50.0
		ZINC, SOLUBLE	58.8		UG/L	20.0

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK1	90L0877-MB1	SILVER, TOTAL	10.0	u	UG/L	10.0
		ALUMINUM, TOTAL	200	u	UG/L	200
		BARIUM, TOTAL	200	u	UG/L	200
		BERYLLIUM, TOTAL	5.0	u	UG/L	5.0
		CALCIUM, TOTAL	5000	u	UG/L	5000
		CADMIUM, TOTAL	5.0	u	UG/L	5.0
		COBALT, TOTAL	50.0	u	UG/L	50.0
		CHROMIUM, TOTAL	10.0	u	UG/L	10.0
		COPPER, TOTAL	25.0	u	UG/L	25.0
		IRON, TOTAL	100	u	UG/L	100
		POTASSIUM, TOTAL	5000	u	UG/L	5000
		MAGNESIUM, TOTAL	5000	u	UG/L	5000
		MANGANESE, TOTAL	15.0	u	UG/L	15.0
		SODIUM, TOTAL	5000	u	UG/L	5000
		NICKEL, TOTAL	40.0	u	UG/L	40.0
		ANTIMONY, TOTAL	60.0	u	UG/L	60.0
		VANADIUM, TOTAL	50.0	u	UG/L	50.0
		ZINC, TOTAL	20.0	u	UG/L	20.0
BLANK1	90L0876-MB1	ARSENIC, TOTAL	10.0	u	UG/L	10
		LEAD, TOTAL	3.0	u	UG/L	3
		SELENIUM, TOTAL	5.0	u	UG/L	5.0
		THALLIUM, TOTAL	10.0	u	UG/L	10.0
BLANK1	90C120A-MB1	MERCURY, TOTAL	0.20	u	UG/L	0.20
BLANK2	90C120A-MB2	MERCURY, TOTAL	0.20	u	UG/L	0.20

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT		SPIKED AMOUNT	%RECOV
-001	GW4-0-1 OR6A	SILVER, TOTAL	45.8	10.0	u	50.0	91.6
		ALUMINUM, TOTAL	2100	200	u	2000	105
		ARSENIC, TOTAL	37.3	10.0	u	40.0	93.2
		BARIUM, TOTAL	2120	200	u	2000	106
		BERYLLIUM, TOTAL	50.0	5.0	u	50.0	100
		CALCIUM, TOTAL	63900	12800		25000	204
		CADMIUM, TOTAL	48.1	5.0	u	50.0	96.2
		COBALT, TOTAL	523	50.0	u	500	105
		CHROMIUM, TOTAL	196	10.0	u	200	98.1
		COPPER, TOTAL	271	25.0	u	250	108
		IRON, TOTAL	26100	30300		1000	-420.
		MERCURY, TOTAL	1.1	0.20	u	1.0	111
		POTASSIUM, TOTAL	55200	5000	u	25000	221
		MAGNESIUM, TOTAL	56500	5000	u	25000	226
		MANGANESE, TOTAL	796	313		500	96.6
		SODIUM, TOTAL	55600	5000	u	25000	222
		NICKEL, TOTAL	502	40.0	u	500	100
		LEAD, TOTAL	23.5	10.9		20.0	63.0
		ANTIMONY, TOTAL	550	60.0	u	500	110
		SELENIUM, TOTAL	10.7	5.0	u	10.0	107
		THALLIUM, TOTAL	45.0	10.0	u	50.0	90.0
		VANADIUM, TOTAL	509	50.0	u	500	102
		ZINC, TOTAL	583	67.4		500	103

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT		SPIKED AMOUNT	%RECOV
-005	GW4-0-1 OR6A	SILVER, SOLUBLE	44.4	10.0	u	50.0	88.8
		ALUMINUM, SOLUBLE	2180	200	u	2000	109
		ARSENIC, SOLUBLE	39.4	10.0	u	40.0	98.5
		BARIUM, SOLUBLE	2180	200	u	2000	109
		BERYLLIUM, SOLUBLE	51.6	5.0	u	50.0	103
		CALCIUM, SOLUBLE	65300	12800		25000	210
		CADMIUM, SOLUBLE	47.7	5.0	u	50.0	95.4
		COBALT, SOLUBLE	531	50.0	u	500	106
		CHROMIUM, SOLUBLE	210	10.0	u	200	105
		COPPER, SOLUBLE	275	25.0	u	250	110
		IRON, SOLUBLE	18000	20000		1000	-210.
		MERCURY, SOLUBLE	1.1	0.20	u	1.0	111
		POTASSIUM, SOLUBLE	56100	5000	u	25000	224
		MAGNESIUM, SOLUBLE	57600	5000	u	25000	230
		MANGANESE, SOLUBLE	785	270		500	103
		SODIUM, SOLUBLE	56900	5000	u	25000	228
		NICKEL, SOLUBLE	519	40.0	u	500	104
		LEAD, SOLUBLE	15.4	3.0	u	20.0	77.0
		ANTIMONY, SOLUBLE	557	60.0	u	500	111
		SELENIUM, SOLUBLE	9.9	5.0	u	10.0	99.
		THALLIUM, SOLUBLE	42.8	10.0	u	50.0	
		VANADIUM, SOLUBLE	523	50.0	u	500	105
		ZINC, SOLUBLE	563	58.8		500	101

ROY F. WESTON INC.

INORGANICS DUPLICATE SPIKE REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	SPIKE#1 %RECOV	SPIKE#2 %RECOV	%DIFF
LCS2	90L0877-LC2	SILVER, LCS	95.1	95.5	0.46
		ALUMINUM, LCS	97.5	97.8	0.39
		BARIUM, LCS	98.9	98.9	0.049
		BERYLLIUM, LCS	98.9	99.0	0.040
		CALCIUM, LCS	99.3	99.5	0.18
		CADMIUM, LCS	94.2	95.0	0.89
		COBALT, LCS	100	99.8	0.24
		CHROMIUM, LCS	97.9	98.0	0.12
		COPPER, LCS	98.4	99.5	1.1
		IRON, LCS	98.8	98.6	0.19
		POTASSIUM, LCS	99.9	99.3	0.61
		MAGNESIUM, LCS	98.8	99.4	0.62
		MANGANESE, LCS	97.2	96.9	0.30
		SODIUM, LCS	96.8	98.1	1.4
		NICKEL, LCS	96.3	96.2	0.15
		ANTIMONY, LCS	101	102	1.0
		VANADIUM, LCS	99.0	99.1	0.16
		ZINC, LCS	99.8	99.3	0.47
LCS2	90L0876-LC2	ARSENIC, LCS	95.7	91.7	4.3
		LEAD, LCS	105	99.7	5.2
		SELENIUM, LCS	98.3	93.0	5.6
		THALLIUM, LCS	91.3	85.0	7.2
LCS2	90C120A-LC2	MERCURY, LCS	118	118	0.00

ROY F. WESTON INC.

INORGANICS PRECISION REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-001REP	GW4-0-1 OR6A	SILVER, TOTAL	10.0 u	10.0 u	NC
		ALUMINUM, TOTAL	200 u	200 u	NC
		ARSENIC, TOTAL	10.0 u	10.0 u	NC
		BARIUM, TOTAL	200 u	200 u	NC
		BERYLLIUM, TOTAL	5.0 u	5.0 u	NC
		CALCIUM, TOTAL	12800	12900	0.82
		CADMIUM, TOTAL	5.0 u	5.0 u	NC
		COBALT, TOTAL	50.0 u	50.0 u	NC
		CHROMIUM, TOTAL	10.0 u	10.0 u	NC
		COPPER, TOTAL	25.0 u	25.0 u	NC
		IRON, TOTAL	30300	30400	0.25
		MERCURY, TOT	0.20u	0.20u	NC
		POTASSIUM, TOTAL	5000 u	5000 u	NC
		MAGNESIUM, TOTAL	5000 u	5000 u	NC
		MANGANESE, TOTAL	313	315	0.41
		SODIUM, TOTAL	5000 u	5000 u	NC
		NICKEL, TOTAL	40.0 u	40.0 u	NC
		LEAD, TOTAL	3.0 u	13.5	NC
		ANTIMONY, TOTAL	60.0 u	60.0 u	NC
		SELENIUM, TOTAL	5.0 u	5.0 u	NC
		THALLIUM, TOTAL	10.0 u	10.0 u	NC
		VANADIUM, TOTAL	50.0 u	50.0 u	NC
		ZINC, TOTAL	67.4	93.0	31.9

ROY F. WESTON INC.

INORGANICS PRECISION REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-005REP	GW4-0-1 OR6A	SILVER, SOLUBLE	10.0 u	10.0 u	NC
		ALUMINUM, SOLUBLE	200 u	200 u	NC
		ARSENIC, SOLUBLE	10.0 u	10.0 u	NC
		BARIUM, SOLUBLE	200 u	200 u	NC
		BERYLLIUM, SOLUBLE	5.0 u	5.0 u	NC
		CALCIUM, SOLUBLE	12800	13100	2.3
		CADMIUM, SOLUBLE	5.0 u	5.0 u	NC
		COBALT, SOLUBLE	50.0 u	50.0 u	NC
		CHROMIUM, SOLUBLE	10.0 u	10.0 u	NC
		COPPER, SOLUBLE	25.0 u	25.0 u	NC
		IRON, SOLUBLE	20000	20500	2.1
		MERCURY, SOLUBLE	0.20u	0.20u	NC
		POTASSIUM, SOLUBLE	5000 u	5000 u	NC
		MAGNESIUM, SOLUBLE	5000 u	5000 u	NC
		MANGANESE, SOLUBLE	270	276	2.3
		SODIUM, SOLUBLE	5000 u	5000 u	NC
		NICKEL, SOLUBLE	40.0 u	40.0 u	NC
		LEAD, SOLUBLE	3.0 u	3.0 u	NC
		ANTIMONY, SOLUBLE	60.0 u	60.0 u	NC
		SELENIUM, SOLUBLE	5.0 u	5.0 u	NC
		THALLIUM, SOLUBLE	10.0 u	10.0 u	NC
		VANADIUM, SOLUBLE	50.0 u	50.0 u	NC
		ZINC, SOLUBLE	58.8	20.0 u	NC

ROY F. WESTON INC.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 08/23/90

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	90L0877-LC1	SILVER, LCS	475	500	UG/L	95.1
		ALUMINUM, LCS	4870	5000	UG/L	97.5
		BARIUM, LCS	4950	5000	UG/L	98.9
		BERYLLIUM, LCS	247	250	UG/L	98.9
		CALCIUM, LCS	24800	25000	UG/L	99.3
		CADMIUM, LCS	235	250	UG/L	94.2
		COBALT, LCS	2500	2500	UG/L	100
		CHROMIUM, LCS	490	500	UG/L	97.9
		COPPER, LCS	1230	1250	UG/L	98.4
		IRON, LCS	4940	5000	UG/L	98.8
		POTASSIUM, LCS	25000	25000	UG/L	99.9
		MAGNESIUM, LCS	24700	25000	UG/L	98.8
		MANGANESE, LCS	729	750	UG/L	97.2
		SODIUM, LCS	24200	25000	UG/L	96.8
		NICKEL, LCS	1930	2000	UG/L	96.3
		ANTIMONY, LCS	3020	3000	UG/L	101
		VANADIUM, LCS	2470	2500	UG/L	99.0
		ZINC, LCS	998	1000	UG/L	99.8
LCS2	90L0877-LC2	SILVER, LCS	478	500	UG/L	95
		ALUMINUM, LCS	4890	5000	UG/L	9
		BARIUM, LCS	4940	5000	UG/L	98.9
		BERYLLIUM, LCS	247	250	UG/L	99.0
		CALCIUM, LCS	24900	25000	UG/L	99.5
		CADMIUM, LCS	238	250	UG/L	95.0
		COBALT, LCS	2490	2500	UG/L	99.8
		CHROMIUM, LCS	490	500	UG/L	98.0
		COPPER, LCS	1240	1250	UG/L	99.5
		IRON, LCS	4930	5000	UG/L	98.6
		POTASSIUM, LCS	24800	25000	UG/L	99.3
		MAGNESIUM, LCS	24800	25000	UG/L	99.4
		MANGANESE, LCS	727	750	UG/L	96.9
		SODIUM, LCS	24500	25000	UG/L	98.1
		NICKEL, LCS	1920	2000	UG/L	96.2
		ANTIMONY, LCS	3050	3000	UG/L	102
		VANADIUM, LCS	2480	2500	UG/L	99.1
		ZINC, LCS	993	1000	UG/L	99.3
LCS1	90L0876-LC1	ARSENIC, LCS	28.7	30.0	UG/L	95.7
		LEAD, LCS	31.5	30.0	UG/L	105

ROY F. WESTON INC.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 08/23/90

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCS1	90L0876-LC1	SELENIUM, LCS	29.5	30.0	UG/L	98.3
		THALLIUM, LCS	27.4	30.0	UG/L	91.3
LCS2	90L0876-LC2	ARSENIC, LCS	27.5	30.0	UG/L	91.7
		LEAD, LCS	29.9	30.0	UG/L	99.7
		SELENIUM, LCS	27.9	30.0	UG/L	93.0
		THALLIUM, LCS	25.5	30.0	UG/L	85.0
LCS1	90C120A-LC1	MERCURY, LCS	5.9	5.0	UG/L	118
LCS2	90C120A-LC2	MERCURY, LCS	5.9	5.0	UG/L	118

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 08/01/90 RFW LOT # :9008L253

GW4-O-1 OR6A

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SILVER, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
SILVER, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
SILVER, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
ALUMINUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
ALUMINUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
ALUMINUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
ARSENIC, TOTAL	001	W	90L0876	08/01/90	08/06/90	08/08/90
ARSENIC, TOTAL	001 REP	W	90L0876	08/01/90	08/06/90	08/08/90
ARSENIC, TOTAL	001 MS	W	90L0876	08/01/90	08/06/90	08/08/90
BARIUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
BARIUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
BARIUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
BERYLLIUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
BERYLLIUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
BERYLLIUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
CALCIUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
CALCIUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
CALCIUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
CADMIUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
CADMIUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
CADMIUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
COBALT, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
COBALT, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
COBALT, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
CHROMIUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
CHROMIUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
CHROMIUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
COPPER, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
COPPER, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
COPPER, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
IRON, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
IRON, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
IRON, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
MERCURY, TOTAL	001	W	90C120A	08/01/90	08/06/90	08/07/90
MERCURY, TOTAL	001 REP	W	90C120A	08/01/90	08/06/90	08/07/90
MERCURY, TOTAL	001 MS	W	90C120A	08/01/90	08/06/90	08/07/90
POTASSIUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 08/01/90 RFW LOT # :9008L253

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
POTASSIUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
POTASSIUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
MAGNESIUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
MAGNESIUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
MAGNESIUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
MANGANESE, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
MANGANESE, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
MANGANESE, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
SODIUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
SODIUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
SODIUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
NICKEL, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
NICKEL, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
NICKEL, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
LEAD, TOTAL	001	W	90L0876	08/01/90	08/06/90	08/08/90
LEAD, TOTAL	001 REP	W	90L0876	08/01/90	08/06/90	08/08/90
LEAD, TOTAL	001 MS	W	90L0876	08/01/90	08/06/90	08/08/90
ANTIMONY, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
ANTIMONY, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
ANTIMONY, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
SELENIUM, TOTAL	001	W	90L0876	08/01/90	08/06/90	08/10/90
SELENIUM, TOTAL	001 REP	W	90L0876	08/01/90	08/06/90	08/10/90
SELENIUM, TOTAL	001 MS	W	90L0876	08/01/90	08/06/90	08/10/90
THALLIUM, TOTAL	001	W	90L0876	08/01/90	08/06/90	08/09/90
THALLIUM, TOTAL	001 REP	W	90L0876	08/01/90	08/06/90	08/09/90
THALLIUM, TOTAL	001 MS	W	90L0876	08/01/90	08/06/90	08/09/90
VANADIUM, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
VANADIUM, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
VANADIUM, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
ZINC, TOTAL	001	W	90L0877	08/01/90	08/06/90	08/09/90
ZINC, TOTAL	001 REP	W	90L0877	08/01/90	08/06/90	08/09/90
ZINC, TOTAL	001 MS	W	90L0877	08/01/90	08/06/90	08/09/90
GW4-0-3 OR6A (FB)						
SILVER, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
ALUMINUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
ARSENIC, TOTAL	003	W	90L0876	08/01/90	08/06/90	08/08/90
BARIUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
BERYLLIUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 08/01/90 RFW LOT # :9008L253

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
CALCIUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
CADMIUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
COBALT, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
CHROMIUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
COPPER, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
IRON, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
MERCURY, TOTAL	003	W	90C120A	08/01/90	08/06/90	08/07/90
POTASSIUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
MAGNESIUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
MANGANESE, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
SODIUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
NICKEL, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
LEAD, TOTAL	003	W	90L0876	08/01/90	08/06/90	08/08/90
ANTIMONY, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
SELENIUM, TOTAL	003	W	90L0876	08/01/90	08/06/90	08/10/90
THALLIUM, TOTAL	003	W	90L0876	08/01/90	08/06/90	08/09/90
VANADIUM, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
ZINC, TOTAL	003	W	90L0877	08/01/90	08/06/90	08/09/90
GW4-0-1 OR6A						
SILVER, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
SILVER, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
SILVER, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
ALUMINUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
ALUMINUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
ALUMINUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
ARSENIC, SOLUBLE	005	W	90L0876	08/01/90	08/06/90	08/08/90
ARSENIC, SOLUBLE	005 REP	W	90L0876	08/01/90	08/06/90	08/08/90
ARSENIC, SOLUBLE	005 MS	W	90L0876	08/01/90	08/06/90	08/08/90
BARIUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
BARIUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
BARIUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
BERYLLIUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
BERYLLIUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
BERYLLIUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
CALCIUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
CALCIUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
CALCIUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
CADMIUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 08/01/90 RFW LOT # :9008L253

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
CADMIUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
CADMIUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
COBALT, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
COBALT, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
COBALT, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
CHROMIUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
CHROMIUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
CHROMIUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
COPPER, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
COPPER, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
COPPER, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
IRON, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
IRON, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
IRON, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
MERCURY, SOLUBLE	005	W	90C120A	08/01/90	08/06/90	08/07/90
MERCURY, SOLUBLE	005 REP	W	90C120A	08/01/90	08/06/90	08/07/90
MERCURY, SOLUBLE	005 MS	W	90C120A	08/01/90	08/06/90	08/07/90
POTASSIUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
POTASSIUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
POTASSIUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
MAGNESIUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
MAGNESIUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
MAGNESIUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
MANGANESE, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
MANGANESE, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
MANGANESE, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
SODIUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
SODIUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
SODIUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
NICKEL, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
NICKEL, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
NICKEL, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
LEAD, SOLUBLE	005	W	90L0876	08/01/90	08/06/90	08/08/90
LEAD, SOLUBLE	005 REP	W	90L0876	08/01/90	08/06/90	08/08/90
LEAD, SOLUBLE	005 MS	W	90L0876	08/01/90	08/06/90	08/08/90
ANTIMONY, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
ANTIMONY, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
ANTIMONY, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
SELENIUM, SOLUBLE	005	W	90L0876	08/01/90	08/06/90	08/10/90
SELENIUM, SOLUBLE	005 REP	W	90L0876	08/01/90	08/06/90	08/10/90

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 08/01/90 RFW LOT # :9008L253

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
SELENIUM, SOLUBLE	005 MS	W	90L0876	08/01/90	08/06/90	08/10/90
THALLIUM, SOLUBLE	005	W	90L0876	08/01/90	08/06/90	08/09/90
THALLIUM, SOLUBLE	005 REP	W	90L0876	08/01/90	08/06/90	08/09/90
THALLIUM, SOLUBLE	005 MS	W	90L0876	08/01/90	08/06/90	08/09/90
VANADIUM, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
VANADIUM, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
VANADIUM, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90
ZINC, SOLUBLE	005	W	90L0877	08/01/90	08/06/90	08/09/90
ZINC, SOLUBLE	005 REP	W	90L0877	08/01/90	08/06/90	08/09/90
ZINC, SOLUBLE	005 MS	W	90L0877	08/01/90	08/06/90	08/09/90

LAB QC:

SILVER LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
ALUMINUM LABORTORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
BARIUM LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
BERYLLIUM LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
CALCIUM LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
CADMIUM LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
COBALT LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
CHROMIUM LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
COPPER LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
IRON LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
POTASSIUM LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
MAGNESIUM LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
MANGANESE LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
SODIUM LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
NICKEL LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
ANTIMONY LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
VANADIUM LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
ZINC LABORATORY	LC1 BS	W	90L0877	N/A	08/06/90	08/09/90
SILVER LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
ALUMINUM LABORTORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
BARIUM LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
BERYLLIUM LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
CALCIUM LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
CADMIUM LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
COBALT LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
CHROMIUM LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
COPPER LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 08/01/90 RFW LOT # :9008L253

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
IRON LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
POTASSIUM LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
MAGNESIUM LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
MANGANESE LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
SODIUM LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
NICKEL LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
ANTIMONY LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
VANADIUM LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
ZINC LABORATORY	LC2 BS	W	90L0877	N/A	08/06/90	08/09/90
SILVER, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
ALUMINUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
BARIUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
BERYLLIUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
CALCIUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
CADMIUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
COBALT, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
CHROMIUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
COPPER, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
IRON, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
POTASSIUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
MAGNESIUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
MANGANESE, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
SODIUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
NICKEL, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
ANTIMONY, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
VANADIUM, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
ZINC, TOTAL	MB1	W	90L0877	N/A	08/06/90	08/09/90
ARSENIC LABORATORY	LC1 BS	W	90L0876	N/A	08/06/90	08/08/90
LEAD LABORATORY	LC1 BS	W	90L0876	N/A	08/06/90	08/08/90
SELENIUM LABORATORY	LC1 BS	W	90L0876	N/A	08/06/90	08/10/90
THALLIUM LABORATORY	LC1 BS	W	90L0876	N/A	08/06/90	08/09/90
ARSENIC LABORATORY	LC2 BS	W	90L0876	N/A	08/06/90	08/08/90
LEAD LABORATORY	LC2 BS	W	90L0876	N/A	08/06/90	08/08/90
SELENIUM LABORATORY	LC2 BS	W	90L0876	N/A	08/06/90	08/10/90
THALLIUM LABORATORY	LC2 BS	W	90L0876	N/A	08/06/90	08/09/90
ARSENIC, TOTAL	MB1	W	90L0876	N/A	08/06/90	08/08/90
LEAD, TOTAL	MB1	W	90L0876	N/A	08/06/90	08/08/90
SELENIUM, TOTAL	MB1	W	90L0876	N/A	08/06/90	08/10/90
THALLIUM, TOTAL	MB1	W	90L0876	N/A	08/06/90	08/09/90
MERCURY LABORATORY	LC1 BS	W	90C120A	N/A	08/06/90	08/07/90

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 08/01/90 RFW LOT # :9008L253

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
MERCURY LABORATORY	LC2 BS	W	90C120A	N/A	08/06/90	08/07/90
MERCURY, TOTAL	MB1	W	90C120A	N/A	08/06/90	08/07/90
MERCURY, TOTAL	MB2	W	90C120A	N/A	08/06/90	08/07/90

ROY F. WESTON INC.

INORGANICS DATA SUMMARY REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
-001	GW4-0-1 OR6A	CYANIDE, TOTAL	10.0	u	UG/L	10.0
-003	GW4-0-3 OR6A (FB)	CYANIDE, TOTAL	10.0	u	UG/L	10.0

ROY F. WESTON INC.

INORGANICS METHOD BLANK DATA SUMMARY PAGE 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	RESULT		UNITS	REPORTING LIMIT
BLANK1	90LC258-MB1	CYANIDE, TOTAL	10.0	u	UG/L	10.0

ROY F. WESTON INC.

INORGANICS ACCURACY REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	INITIAL RESULT	SPIKED AMOUNT	%RECOV
-001	GW4-0-1 OR6A	CYANIDE, TOTAL	91.4	10.0 u	100	91.4

ROY F. WESTON INC.

INORGANICS PRECISION REPORT 08/23/90

CLIENT: STANDARD CHLORINE
WORK ORDER: 2267-09-02-0000

WESTON BATCH #: 9008L253

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	% DIFF
-001REP	GW4-0-1 OR6A	CYANIDE, TOTAL	10.0 u	10.0 u	NC

ROY F. WESTON INC.

INORGANICS LABORATORY CONTROL STANDARDS REPORT 08/23/90

SAMPLE	SITE ID	ANALYTE	SPIKED SAMPLE	SPIKED AMOUNT	UNITS	%RECOV
LCSS1	90LC258-LCS1	CYANIDE, TOTAL LCS	95.2	100	UG/L	95.2
LCSS2	90LC258-LCS2	CYANIDE, TOTAL LCS	94.6	100	UG/L	94.6

Roy F. Weston, Inc. - Lionville Laboratory
INORGANIC ANALYTICAL DATA PACKAGE FOR
STANDARD CHLORINE

DATE RECEIVED: 08/01/90 RFW LOT # :9008L253

CLIENT ID /ANALYSIS	RFW #	MTX	PREP #	COLLECTION	EXTR/PREP	ANALYSIS
GW4-0-1 OR6A						
TOTAL CYANIDE	001	W	90LC258	08/01/90	08/06/90	08/06/90
TOTAL CYANIDE	001 REP	W	90LC258	08/01/90	08/06/90	08/06/90
TOTAL CYANIDE	001 MS	W	90LC258	08/01/90	08/06/90	08/06/90
GW4-0-3 OR6A (FB)						
TOTAL CYANIDE	003	W	90LC258	08/01/90	08/06/90	08/06/90
LAB QC:						
TOTAL CYANIDE	CCB	W	90LC258	N/A	08/06/90	08/06/90
TOTAL CYANIDE	CCB	W	90LC258	N/A	08/06/90	08/06/90
TOTAL CYANIDE	CCV L	W	90LC258	N/A	08/06/90	08/06/90
TOTAL CYANIDE	CCV L	W	90LC258	N/A	08/06/90	08/06/90
TOTAL CYANIDE	ICB	W	90LC258	N/A	08/06/90	08/06/90
TOTAL CYANIDE	ICV L	W	90LC258	N/A	08/06/90	08/06/90
TOTAL CYANIDE	LCS L	W	90LC258	N/A	08/06/90	08/06/90
TOTAL CYANIDE	LCS L	W	90LC258	N/A	08/06/90	08/06/90
TOTAL CYANIDE	MB1	W	90LC258	N/A	08/06/90	08/06/90

WESTON

WESTON ANALYTICS
INORGANIC METHODOLOGY SUMMARY

METALS

EPA	206.2	:	As		
EPA	200.7	:	Sb		
EPA	239.1	:	Pb		
EPA	270.1	:	Se		
EPA	279.2	:	Tl		
EPA	245.1	:	Hg		
EPA	200.7	:	Ag	Co	Mn
			Al	Cr	Na
			Ba	Cu	Ni
			Be	Fe	V
			Ca	K	Zn
			Cd	Mg	

Total Cyanide : EPA 335.2

Total Recoverable Phenolics : EPA 420.1

Other :

WESTON

MATRIX SPIKE SOLUTION

SOURCE: INORGANIC VENTURES LABORATORY

ELEMENTS	STOCK CONCENTRATION (ppb)	FINAL CONCENTRATION(ppb)
Aluminum	200,000	2,000
Antimony	50,000	500
Arsenic	4,000	40
Barium	200,000	2,000
Beryllium	5,000	50
Cadmium	5,000	50
Calcium	300,000	30,000
Chromium	2,000	200
Cobalt	5,000	500
Copper	2,500	250
Iron	10,000	1,000
Lead	200	20
Magnesium	250,000	25,000
Manganese	5,000	500
Mercury	10	1.0
Nickel	5,000	500
Potassium	250,000	25,000
Selenium	100	10
Silver	500	50
Sodium	250,000	25,000
Thallium	500	50
Vanadium	5,000	500
Zinc	1,000	500
Cyanide	1,000	100

* 1 mL of stock concentration is used for water matrix spike, final volume digestate 100 mL.

* 2 mLs of stock concentration is used for soil matrix spike, final volume digestate 200 mL.

ANALYTICAL SPIKES

ELEMENTS	SOURCE	STOCK	VOLUME ADDED TO 1 mLs	FINAL CONCENTRATION (p
Arsenic	Aldrich	2ppm	10 uL	20
Selenium	Aldrich	1ppm	10 uL	10
Lead	Aldrich	1ppm	10 uL	10
Thallium	Mallinckrodt	2ppm	10 uL	20

WESTON

USEPA CONTRACT LABORATORY PROGRAM
DATA QUALIFIER DESCRIPTIONS
INORGANIC ANALYSIS SOW No. 787

C(Concentration) Qualifiers:

B - Indicates that the reported value is less than the CRDL but greater than the IDL.

U - Indicates that the analyte was analyzed for but not detected.

Q Qualifiers:

E - The reported value is estimated because of the presence of interference.

M - Duplicate injection precision not met.

N - Spiked sample recovery not within control limits.

S - The reported value was determined by the method of standard additions (MSA).

W - Post digestion spike for furnace AA analysis is out of control limits (85-125%) while sample absorbance is less than 50% of spike absorbance.

* - Duplicate analysis not within control limits.

+ - Correlation coefficient for the MSA is less than 0.995.

M(Method) Qualifier:

P - ICP
A - Flame AA
F - Furnace AA
CV - Manual Cold Vapor AA.
AV - Automated Cold Vapor AA.
AS - Semi-automated Spectrophotometric
C - Manual Spectrophotometric
T - Titrimetric
NR - Not Required

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

SOW No.: 7/87

EPA Sample No.	Lab Sample ID.
GW4-0-1-ORGA	9008253001
GW4-0-1-ORGAD	9008253001
GW4-0-1-ORGAS	9008253001
GW4-0-3-ORGA	9008253003
GW4-0-10RGA	9008253005
GW4-0-10RGAD	9008253005
GW4-0-10RGAS	9008253005

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Lab Manager: [signature]

Date: 8/22/90

U.S. EPA - CLP

01

EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

GW4-0-10RGA

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Matrix (soil/water): WATER Lab Sample ID: 9008L253-0C

Level (low/med): LOW Date Received: 08/01/90

% 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	84.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	2.0	U		F
7440-39-3	Barium	68.5	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	12800		E	P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	4.0	U		P
7440-50-8	Copper	5.6	B		P
7439-89-6	Iron	30300			P
7439-92-1	Lead	14.6		NS	F
7439-95-4	Magnesium	4590	B		P
7439-96-5	Manganese	313			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	7.0	U		P
7440-09-7	Potassium	2570	B		P
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	3310	B		P
7440-28-0	Thallium	4.0	U		F
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	67.4		*	P
	Cyanide	10.0	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

GW 4-6-3 OR6A

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Matrix (soil/water): WATER Lab Sample ID: 9008L253-0

Level (low/med): LOW Date Received: 08/01/90

% 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	84.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	2.0	U		F
7440-39-3	Barium	5.0	U		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	90.9	B	E	P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	4.0	U		P
7440-50-8	Copper	5.0	U		P
7439-89-6	Iron	44.0	U		P
7439-92-1	Lead	3.0	U	N	F
7439-95-4	Magnesium	56.0	U		P
7439-96-5	Manganese	2.0	U		P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	7.0	U		P
7440-09-7	Potassium	723	U		P
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	91.2	B		P
7440-28-0	Thallium	4.0	U		F
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	50.5		*	P
	Cyanide	10.0	U		C

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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EPA SAMPLE NO.

1

INORGANIC ANALYSIS DATA SHEET

GW4-0-10R6A

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Matrix (soil/water): WATER Lab Sample ID: 9008L253-0

Level (low/med): LOW Date Received: 08/01/90

% 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	84.0	U		P
7440-36-0	Antimony	22.0	U		P
7440-38-2	Arsenic	2.0	U		F
7440-39-3	Barium	64.6	B		P
7440-41-7	Beryllium	1.0	U		P
7440-43-9	Cadmium	3.0	U		P
7440-70-2	Calcium	12800		E	P
7440-47-3	Chromium	2.0	U		P
7440-48-4	Cobalt	4.0	U		P
7440-50-8	Copper	5.0	B		P
7439-89-6	Iron	20000			P
7439-92-1	Lead	3.0	U	N	F
7439-95-4	Magnesium	4460	B		P
7439-96-5	Manganese	270			P
7439-97-6	Mercury	0.20	U		CV
7440-02-0	Nickel	7.0	U		P
7440-09-7	Potassium	2530	B		P
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	3.0	U		P
7440-23-5	Sodium	3160	B		P
7440-28-0	Thallium	4.0	U		F
7440-62-2	Vanadium	5.0	U		P
7440-66-6	Zinc	58.8		*	P
	Cyanide				

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:

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2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Initial Calibration Source: IV

Continuing Calibration Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	5000.0	5011.50	100.2	5000.0	4902.80	98.1	5118.40	102.4	P
Antimony	3000.0	3002.50	100.1	3000.0	2953.90	98.5	3105.80	103.5	P
Arsenic	30.0	29.90	99.7	30.0	29.90	99.7	29.10	97.0	F
Barium	5000.0	4989.40	99.8	5000.0	4892.00	97.8	5153.90	103.1	P
Beryllium	250.0	251.90	100.8	250.0	248.30	99.3	260.20	104.1	P
Cadmium	250.0	237.50	95.0	250.0	233.30	93.3	239.30	95.7	
Calcium	25000.0	24758.30	99.0	25000.0	24501.10	98.0	25595.00	102.4	P
Chromium	500.0	495.10	99.0	500.0	488.20	97.6	513.20	102.6	P
Cobalt	2500.0	2524.90	101.0	2500.0	2494.80	99.8	2619.00	104.8	P
Copper	1250.0	1267.80	101.4	1250.0	1237.30	99.0	1292.00	103.4	P
Iron	5000.0	4975.80	99.5	5000.0	4935.10	98.7	5158.80	103.2	P
Lead	30.0	30.70	102.3	30.0	31.10	103.7	31.90	106.3	F
Magnesium	25000.0	25097.40	100.4	25000.0	24933.70	99.7	25948.40	103.8	P
Manganese	750.0	737.50	98.3	750.0	727.80	97.0	759.50	101.3	P
Mercury	5.0	5.39	107.8	5.0	5.87	117.4	5.72	114.4	CV
Nickel	2000.0	1947.70	97.4	2000.0	1918.70	95.9	2014.40	100.7	P
Potassium	25000.0	25349.20	101.4	25000.0	24631.90	98.5	26368.40	105.5	P
Selenium	30.0	31.20	104.0	30.0	31.20	104.0	30.80	102.7	F
Silver	500.0	475.30	95.1	500.0	462.20	92.4	480.60	96.1	P
Sodium	25000.0	25483.90	101.9	25000.0	24968.50	99.9	26311.00	105.2	P
Thallium	30.0	29.60	98.7	30.0	29.10	97.0	28.90	96.3	F
Vanadium	2500.0	2496.60	99.9	2500.0	2471.60	98.9	2579.90	103.2	P
Zinc	1000.0	1002.30	100.2	1000.0	990.00	99.0	1032.40	103.2	P
Cyanide	100.0	98.30	98.3	100.0	99.50	99.5	98.90	98.9	CV

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Initial Calibration Source: IV

Continuing Calibration Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	5000.0			5000.0	5232.00	104.6			P
Antimony	3000.0			3000.0	3129.50	104.3			P
Arsenic	30.0			30.0	30.00	100.0	29.10	97.0	F
Barium	5000.0			5000.0	5238.10	104.8			P
Beryllium	250.0			250.0	264.90	106.0			P
Cadmium	250.0			250.0	241.80	96.7			P
Calcium	25000.0			25000.0	26201.30	104.8			P
Chromium	500.0			500.0	521.00	104.2			P
Cobalt	2500.0			2500.0	2651.30	106.1			P
Copper	1250.0			1250.0	1319.90	105.6			P
Iron	5000.0			5000.0	5260.10	105.2			P
Lead	30.0			30.0	29.70	99.0	31.70	105.7	F
Magnesium	25000.0			25000.0	26530.00	106.1			P
Manganese	750.0			750.0	770.50	102.7			P
Mercury	2.0			5.0	5.87	117.4	6.00	120.0	CV
Nickel	2000.0			2000.0	2060.20	103.0			P
Potassium	25000.0			25000.0	27010.20	108.0			P
Selenium	30.0			30.0	29.10	97.0	30.40	101.3	F
Silver	500.0			500.0	488.10	97.6			P
Sodium	25000.0			25000.0	26774.20	107.1			P
Thallium	30.0			30.0	28.70	95.7	28.00	93.3	F
Vanadium	2500.0			2500.0	2621.40	104.9			P
Zinc	1000.0			1000.0	1054.10	105.4			P
Cyanide	100.0			100.0					

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Initial Calibration Source: IV

Continuing Calibration Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	5000.0			5000.0					
Antimony	3000.0			3000.0					
Arsenic	30.0			30.0	29.90	99.7			F
Barium	5000.0			5000.0					
Beryllium	250.0			250.0					
Cadmium	250.0			250.0					
Calcium	25000.0			25000.0					
Chromium	500.0			500.0					
Cobalt	2500.0			2500.0					
Copper	1250.0			1250.0					
Iron	5000.0			5000.0					
Lead	30.0			30.0	29.20	97.3	30.10	100.3	F
Magnesium	25000.0			25000.0					
Manganese	750.0			750.0					
Mercury	2.0			2.0					
Nickel	2000.0			2000.0					
Potassium	25000.0			25000.0					
Selenium	30.0			30.0	29.60	98.7	27.90	93.0	F
Silver	500.0			500.0					
Sodium	25000.0			25000.0					
Thallium	30.0			30.0	27.40	91.3			F
Vanadium	2500.0			2500.0					
Zinc	1000.0			1000.0					
Cyanide	100.0			100.0					

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Initial Calibration Source: IV

Continuing Calibration Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum	5000.0			5000.0					
Antimony	3000.0			3000.0					
Arsenic	30.0			30.0					
Barium	5000.0			5000.0					
Beryllium	250.0			250.0					
Cadmium	250.0			250.0					
Calcium	25000.0			25000.0					
Chromium	500.0			500.0					
Cobalt	2500.0			2500.0					
Copper	1250.0			1250.0					
Iron	5000.0			5000.0					
Lead	30.0			30.0	27.40	91.3			F
Magnesium	25000.0			25000.0					
Manganese	750.0			750.0					
Mercury	2.0			2.0					
Nickel	2000.0			2000.0					
Potassium	25000.0			25000.0					
Selenium	30.0			30.0	28.30	94.3	29.10	97.0	F
Silver	500.0			500.0					
Sodium	25000.0			25000.0					
Thallium	30.0			30.0					
Vanadium	2500.0			2500.0					
Zinc	1000.0			1000.0					
Cyanide	100.0			100.0					

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

AA CRDL Standard Source: IV

ICP CRDL Standard Source: IV

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial True	Initial Found	Initial %R	Final Found	Final %R
Aluminum				200.0	376.70	188.4	360.90	180.4
Antimony				120.0	135.70	113.1	129.40	107.8
Arsenic	10.0	10.30	103.0					
Barium				200.0	200.10	100.0	213.20	106.6
Beryllium				10.0	10.40	104.0	11.30	113
Cadmium				10.0	10.50	105.0	10.50	105
Calcium				1000.0	1208.90	120.9	1270.90	127.1
Chromium				20.0	16.50	82.5	24.90	124.5
Cobalt				100.0	104.10	104.1	107.70	107.7
Copper				50.0	62.10	124.2	64.70	129.4
Iron				200.0	305.20	152.6	314.70	157.4
Lead	3.0	2.80	93.3					
Magnesium				1000.0	1174.30	117.4	1150.20	115.0
Manganese				30.0	30.80	102.7	32.40	108.0
Mercury								
Nickel				80.0	85.60	107.0	89.40	111.8
Potassium				1000.0	585.10	58.5	924.90	92.5
Selenium	5.0	4.20	84.0					
Silver				20.0	19.30	96.5	18.50	92.5
Sodium				1000.0	936.10	93.6	935.20	93.5
Thallium	10.0	10.10	101.0					
Vanadium				100.0	93.40	93.4	91.30	91.3
Zinc				40.0	52.10	130.2	52.10	130.2

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2B
CRDL STANDARD FOR AA AND ICP

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

AA CRDL Standard Source: IV

ICP CRDL Standard Source: IV

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum				200.0				
Antimony				120.0				
Arsenic	10.0							
Barium				200.0				
Beryllium				10.0				
Cadmium				10.0				
Calcium				1000.0				
Chromium				20.0				
Cobalt				100.0				
Copper				50.0				
Iron				200.0				
Lead	3.0	2.50	83.3					
Magnesium				1000.0				
Manganese				30.0				
Mercury								
Nickel				80.0				
Potassium				1000.0				
Selenium	5.0							
Silver				20.0				
Sodium				1000.0				
Thallium	10.0							
Vanadium				100.0				
Zinc				40.0				

U.S. EPA - CLP

3
BLANKS

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum	84.0	U	84.0	U	84.0	U	84.0	U	84.0	U	P
Antimony	27.4	B	22.0	U	22.4	B	22.0	U	22.0	B	P
Arsenic	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	F
Barium	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	P
Cadmium	3.0	U	3.0	U	3.0	U	3.0	U	1.0	U	P
Calcium	66.0	U	66.0	U	66.0	U	66.0	U	66.0	U	P
Chromium	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Cobalt	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	P
Copper	5.2	B	5.0	U	5.0	U	5.0	U	5.0	U	P
Iron	44.0	U	44.0	U	44.0	U	44.0	U	44.0	U	P
Lead	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	F
Magnesium	56.0	U	56.0	U	56.0	U	56.0	U	116	B	P
Manganese	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	CV
Nickel	7.9	B	7.0	U	7.0	U	-7.9	B	7.0	U	P
Potassium	723.0	U	723.0	U	723.0	U	-773.9	B	723	U	P
Selenium	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	F
Silver	3.0	U	3.0	U	3.0	U	3.0	U	3.0	U	P
Sodium	91.0	U	96.8	B	91.0	U	91.0	U	165	B	P
Thallium	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	F
Vanadium	5.0	U	5.0	U	5.0	U	5.0	U	10.8	B	P
Zinc	5.0	U	5.0	U	5.0	U	5.0	U	5.0	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	C

3
BLANKS

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic			2.0	U	2.0	U					F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead	3.0	U	3.0	U	3.0	U	3.0	U			F
Magnesium											
Manganese											
Mercury			0.2	U							CV
Nickel											
Potassium											
Selenium			2.0	U	2.0	U	2.0	U			F
Silver											
Sodium											
Thallium			4.0	U	4.0	U					F
Vanadium											
Zinc											
Cyanide											

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3
BLANKS

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead			3.0	U							F
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			2.0	U	2.0	U					F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: ICP61 ICS Source: IV

Concentration Units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	512480	488060	497474	499699.5	102.4	531618	527208.8	108.0
Antimony			80	69.4	0.0	75	66.1	0.0
Arsenic								
Barium		480	16	496.0	103.3	16	526.9	109.8
Beryllium		488	0	442.3	90.6	0	467.2	95.7
Cadmium		1027	-3	971.9	94.6	-4	1010.9	98.4
Calcium	491680	470280	463465	470744.8	100.1	498663	499183.6	106.1
Chromium		492	2	442.0	89.8	-2	468.6	95.2
Cobalt		481	9	463.5	96.4	7	491.9	102.3
Copper		452	-5	478.2	105.8	-11	504.6	111.6
Iron	192360	183580	180383	181988.5	99.1	192807	192605.7	104.9
Lead								
Magnesium	509300	487140	487510	494300.8	101.5	525241	525228.5	107.8
Manganese		463	-64	384.6	83.1	-73	399.2	86.2
Mercury								
Nickel		850	-12	856.8	100.8	-11	906.1	106.6
Potassium			-868	-226.5	0.0	-887	-1208.0	0.0
Selenium								
Silver		1076	4	1031.8	95.9	8	1084.3	100.8
Sodium			12	38.2	0.0	86	26.5	0.0
Thallium								
Vanadium		513	54	521.4	101.6	62	549.3	107.1
Zinc		940	-10	927.7	98.7	-15	982.9	104.6

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

GW4-0-1-082A S

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Matrix (soil/water): WATER Level (low/med): LOW

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2096.8000		84.0000	U	2000.0	104.8		P
Antimony	75-125	550.1001		22.0000	U	500.0	110.0		P
Arsenic	75-125	37.3000		2.0000	U	40.0	93.2		F
Barium	75-125	2115.5000		68.5000	B	2000.0	102.4		P
Beryllium	75-125	50.0000		1.0000	U	50.0	100.0		P
Cadmium	75-125	48.1000		3.0000	U	50.0	96.2		P
Calcium									NR
Chromium	75-125	196.2000		2.0000	U	200.0	98.1		P
Cobalt	75-125	522.8000		4.0000	U	500.0	104.6		P
Copper	75-125	271.1001		5.6000	B	250.0	106.2		P
Iron		26140.3000		30344.0000		1000.0	-420.4		
Lead	75-125	23.5000		13.9040		20.0	48.0	N	F
Magnesium									NR
Manganese	75-125	796.5000		313.3999		500.0	96.6		P
Mercury	75-125	1.1070		0.2000	U	1.0	110.7		CV
Nickel	75-125	502.5000		7.0000	U	500.0	100.5		P
Potassium									NR
Selenium	75-125	10.7000		2.0000	U	10.0	107.0		F
Silver	75-125	45.8000		3.0000	U	50.0	91.6		P
Sodium									NR
Thallium	75-125	45.0000		4.0000	U	50.0	90.0		F
Vanadium	75-125	509.3999		5.0000	U	500.0	101.9		P
Zinc	75-125	583.1001		67.4000		500.0	103.1		P
Cyanide	75-125	91.4000		10.0000	U	100.0	91.4		C

Comments:

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5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
GW4-0-102GA S

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Matrix (soil/water): WATER Level (low/med): LOW

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

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2180.6001		84.0000	U	2000.0	109.0		P
Antimony	75-125	556.8000		22.0000	U	500.0	111.4		P
Arsenic	75-125	39.4000		2.0000	U	40.0	98.5		F
Barium	75-125	2175.8999		64.6000	B	2000.0	105.6		P
Beryllium	75-125	51.6000		1.0000	U	50.0	103.2		P
Cadmium	75-125	47.7000		3.0000	U	50.0	95.4		P
Calcium									NR
Chromium	75-125	210.5000		2.0000	U	200.0	105.2		P
Cobalt	75-125	530.8000		4.0000	U	500.0	106.2		P
Copper	75-125	275.1001		5.0000	B	250.0	108.0		P
Iron		17985.8000		20037.8000		1000.0	-205.2		P
Lead	75-125	15.5000		3.0000	U	20.0	77.5		F
Magnesium									NR
Manganese	75-125	785.3000		269.5000		500.0	103.2		P
Mercury	75-125	1.1070		0.2000	U	1.0	110.7		CV
Nickel	75-125	519.0000		7.0000	U	500.0	103.8		P
Potassium									NR
Selenium	75-125	9.9000		2.0000	U	10.0	99.0		F
Silver	75-125	44.4000		3.0000	U	50.0	88.8		P
Sodium									NR
Thallium	75-125	42.8000		4.0000	U	50.0	85.6		F
Vanadium	75-125	522.8000		5.0000	U	500.0	104.6		P
Zinc	75-125	563.0000		58.8000		500.0	100.8		P
Cyanide									NR

Comments:

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5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

A

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony									NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									
Chromium									
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silver									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

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6
DUPLICATES

EPA SAMPLE NO.

GW4-0-1-ORGA
D

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	84.0000	U	84.0000	U			P
Antimony	60.0	22.0000	U	22.0000	U			P
Arsenic	10.0	2.0000	U	2.0000	U			F
Barium	200.0	68.5000	B	69.4000	B	1.3		P
Beryllium	5.0	1.0000	U	1.0000	U			P
Cadmium	5.0	3.0000	U	3.0000	U			P
Calcium	5000.0	12758.8000		12864.3980		0.8		P
Chromium	10.0	2.0000	U	2.0000	U			P
Cobalt	50.0	4.0000	U	4.0000	U			P
Copper	25.0	5.6000	B	5.3000	B	5.5		P
Iron		30344.0000		30421.1010		0.3		P
Lead	5.0	13.9040		14.4000		3.5		F
Magnesium	5000.0	4586.8008	B	4594.1016	B	0.2		P
Manganese		313.3999		314.7000		0.4		P
Mercury	0.2	0.2000	U	0.2000	U			CV
Nickel	40.0	7.0000	U	7.0000	U			P
Potassium	5000.0	2567.0000	B	3038.8999	B	16.8		P
Selenium	5.0	2.0000	U	2.0000	U			F
Silver	10.0	3.0000	U	3.0000	U			P
Sodium	5000.0	3311.0000	B	3216.7000	B	2.9		P
Thallium	10.0	4.0000	U	4.0000	U			F
Vanadium	50.0	5.0000	U	5.0000	U			P
Zinc	20.0	67.4000		93.0000		31.9	*	P
Cyanide	10.0	10.0000	U	10.0000	U			C

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6
DUPLICATES

EPA SAMPLE NO.

GW4-0-10EGA
D

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate:

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	200.0	84.0000	U	84.0000	U			P
Antimony	60.0	22.0000	U	22.1000	B	200.0		P
Arsenic	10.0	2.0000	U	2.0000	U			F
Barium	200.0	64.6000	B	65.2000	B	0.9		P
Beryllium	5.0	1.0000	U	1.0000	U			P
Cadmium	5.0	3.0000	U	3.0000	U			P
Calcium	5000.0	12795.3000		13087.1010		2.3		P
Chromium	10.0	2.0000	U	2.0000	U			P
Cobalt	50.0	4.0000	U	4.0000	U			P
Copper	25.0	5.0000	B	5.0000	U	200.0		P
Iron		20037.8000		20453.3000		2.1		P
Lead	5.0	3.0000	U	3.0000	U			F
Magnesium	5000.0	4458.3984	B	4602.6016	B	3.2		P
Manganese		269.5000		275.7000		2.3		P
Mercury	0.2	0.2000	U	0.2000	U			CV
Nickel	40.0	7.0000	U	7.0000	U			P
Potassium	5000.0	2529.3000	B	2869.0000	B	12.6		P
Selenium	5.0	2.0000	U	2.0000	U			F
Silver	10.0	3.0000	U	3.0000	U			P
Sodium	5000.0	3159.0000	B	3241.1001	B	2.6		P
Thallium	10.0	4.0000	U	4.0000	U			F
Vanadium	50.0	5.0000	U	5.0000	U			P
Zinc	20.0	58.8000		17.0000	B	110.3	*	P
Cyanide								

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7

LABORATORY CONTROL SAMPLE

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Solid LCS Source: IV

Aqueous LCS Source: IV

Analyte	Aqueous (ug/L) True	Found	%R(1)	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	5000.0	4873.00	97.5	1000.0			0.0	0.0	
Antimony	3000.0	3017.40	100.6	600.0			0.0	0.0	
Arsenic	30.0	28.70	95.7	6.0			0.0	0.0	
Barium	5000.0	4947.00	98.9	1000.0			0.0	0.0	
Beryllium	250.0	247.30	98.9	50.0			0.0	0.0	
Cadmium	250.0	235.40	94.2	50.0			0.0	0.0	
Calcium	25000.0	24832.10	99.3	5000.0			0.0	0.0	
Chromium	500.0	489.50	97.9	100.0			0.0	0.0	
Cobalt	2500.0	2499.90	100.0	500.0			0.0	0.0	
Copper	1250.0	1230.30	98.4	250.0			0.0	0.0	
Iron	5000.0	4940.50	98.8	1000.0			0.0	0.0	
Lead	30.0	31.50	105.0	6.0			0.0	0.0	
Magnesium	25000.0	24691.60	98.8	5000.0			0.0	0.0	
Manganese	750.0	729.30	97.2	150.0			0.0	0.0	
Mercury	5.0	5.87	117.4	1.0			0.0	0.0	
Nickel	2000.0	1926.50	96.3	400.0			0.0	0.0	
Potassium	25000.0	24971.70	99.9	5000.0			0.0	0.0	
Selenium	30.0	29.60	98.7	6.0			0.0	0.0	
Silver	500.0	475.30	95.1	100.0			0.0	0.0	
Sodium	25000.0	24196.10	96.8	5000.0			0.0	0.0	
Thallium	30.0	27.40	91.3	6.0			0.0	0.0	
Vanadium	2500.0	2473.80	99.0	500.0			0.0	0.0	
Zinc	1000.0	997.50	99.8	200.0			0.0	0.0	
Cyanide	100.0	94.80	94.8	10.0			0.0	0.0	

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7

LABORATORY CONTROL SAMPLE

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Solid LCS Source: IV

Aqueous LCS Source: IV

Analyte	Aqueous (ug/L) True	Found	%R(1)	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum	5000.0	4891.80	97.8	1000.0			0.0	0.0	
Antimony	3000.0	3048.60	101.6	600.0			0.0	0.0	
Arsenic	30.0	27.50	91.7	6.0			0.0	0.0	
Barium	5000.0	4944.60	98.9	1000.0			0.0	0.0	
Beryllium	250.0	247.40	99.0	50.0			0.0	0.0	
Cadmium	250.0	237.50	95.0	50.0			0.0	0.0	
Calcium	25000.0	24877.00	99.5	5000.0			0.0	0.0	
Chromium	500.0	490.10	98.0	100.0			0.0	0.0	
Cobalt	2500.0	2493.90	99.8	500.0			0.0	0.0	
Copper	1250.0	1243.30	99.5	250.0			0.0	0.0	
Iron	5000.0	4931.20	98.6	1000.0			0.0	0.0	
Lead	30.0	29.90	99.7	6.0			0.0	0.0	
Magnesium	25000.0	24844.10	99.4	5000.0			0.0	0.0	
Manganese	750.0	727.10	96.9	150.0			0.0	0.0	
Mercury	5.0	5.87	117.4	1.0			0.0	0.0	
Nickel	2000.0	1923.60	96.2	400.0			0.0	0.0	
Potassium	25000.0	24820.70	99.3	5000.0			0.0	0.0	
Selenium	30.0	27.90	93.0	6.0			0.0	0.0	
Silver	500.0	477.50	95.5	100.0			0.0	0.0	
Sodium	25000.0	24530.00	98.1	5000.0			0.0	0.0	
Thallium	30.0	25.50	85.0	6.0			0.0	0.0	
Vanadium	2500.0	2477.80	99.1	500.0			0.0	0.0	
Zinc	1000.0	992.80	99.3	200.0			0.0	0.0	
Cyanide	100.0	94.60	94.6	10.0			0.0	0.0	

FORM VII - IN 12/87 Rev.

U.S. EPA - CLP

8
STANDARD ADDITION RESULTS

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Concentration Units: ug/L

EPA Sample No.	An	Dil	0 ADD ABS	1 ADD CON	1 ADD ABS	2 ADD CON	2 ADD ABS	3 ADD CON	3 ADD ABS	Final Conc.	r	Q
6N40J-ORGA	PB	2	0.049	10	0.116	20	0.187	30	0.250	14.6	0.9997	
6N4-0J-ORGAD	PB	2	0.050	10	0.120	20	0.192	30	0.259	14.4	0.9999	

U.S. EPA - CLP

9

ICP SERIAL DILUTIONS

EPA SAMPLE NO.

GW4-0-1-0EGA L

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	84.00	U	420.00	U			P
Antimony	22.00	U	110.00	U			P
Arsenic							F
Barium	68.50	B	68.50	B	0.0		P
Beryllium	1.00	U	5.00	U			P
Cadmium	3.00	U	15.00	U			P
Calcium	12758.80		12615.00	B	1.1		P
Chromium	2.00	U	10.00	U			P
Cobalt	4.00	U	20.00	U			P
Copper	5.60	B	25.00	U	100.0		P
Iron	30344.00		29710.00		2.1		P
Lead							F
Magnesium	4586.80	B	4205.00	B	8.3		P
Manganese	313.40		307.15		2.0		P
Mercury							CV
Nickel	7.00	U	35.00	U			P
Potassium	2567.00	B	3615.00	U	100.0		P
Selenium							F
Silver	3.00	U	15.00	U			P
Sodium	3311.00	B	2963.00	B	10.5		P
Thallium							F
Vanadium	5.00	U	25.00	U			P
Zinc	67.40		119.85		77.8		P

024

EPA SAMPLE N

GW4-0-30RGA
L

9

ICP SERIAL DILUTIONS

Lab Name: WESTON - LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP05

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	84.00	U	420.00	U			P
Antimony	22.00	U	110.00	U			P
Arsenic							
Barium	64.59	B	74.00	B	14.5		P
Beryllium	1.00	U	5.00	U			P
Cadmium	3.00	U	15.00	U			P
Calcium	12800.00		14135.00	B	104.3	E	P
Chromium	2.00	U	10.00	U			P
Cobalt	4.00	U	20.00	U			P
Copper	5.00	U	25.00	U			P
Iron	20040.00		21955.00	B	9.5		P
Lead							
Magnesium	4458.00	B	4844.50	B	8.6		P
Manganese	269.00		292.35		8.6		P
Mercury							
Nickel	7.00	U	51.50	B			P
Potassium	2529.00	B	3615.00	U	42.9		P
Selenium							
Silver	3.00	U	15.00	U			P
Sodium	3159.00	B	3369.00	B	6.6		P
Thallium							
Vanadium	5.00	U	25.00	U			P
Zinc	58.77		101.00		72.0		P

FORM IX - IN

U.S. EPA - CLP

10
HOLDING TIMES

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

EPA Sample No.	Matrix	Date Received	Mercury Prep Date	Mercury Holding Time	Cyanide Prep Date	Cyanide Holding Time
GW4-0-1-0R6A	WATER	08/01/90	08/06/90	5		
GW4-0-1-0R6AD	WATER	08/01/90	08/06/90	5		
GW4-0-1-0R6AS	WATER	08/01/90	08/06/90	5		
GW4-0-3-0R6A	WATER	08/01/90	08/06/90	5		
GW4-0-1-0RGA	WATER	08/01/90	08/06/90	5		
GW4-0-1ØR6AD	WATER	08/01/90	08/06/90	5		
GW4-0-10R6AS	WATER	08/01/90	08/06/90	5		

FORM X - IN

U.S. EPA - CLP

11
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WESTON - LIONVILLE Contract:

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: ICP61 Date: 10/15/89

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.20		200.0	84.0	P
Antimony	206.80		60.0	22.0	P
Arsenic			10.0		
Barium	493.40		200.0	5.0	P
Beryllium	313.00		5.0	1.0	P
Cadmium	228.80		5.0	3.0	P
Calcium	317.90		5000.0	66.0	P
Chromium	267.70		10.0	2.0	P
Cobalt	228.60		50.0	4.0	P
Copper	324.70		25.0	5.0	P
Iron	259.90		100.0	44.0	P
Lead			5.0		
Magnesium	279.00		5000.0	56.0	P
Manganese	257.60		15.0	2.0	P
Mercury			0.2		
Nickel	231.60		40.0	7.0	P
Potassium	766.40		5000.0	723.0	P
Selenium			5.0		
Silver	328.00		10.0	3.0	P
Sodium	588.90		5000.0	91.0	P
Thallium			10.0		
Vanadium	292.40		50.0	5.0	P
Zinc	213.80		20.0	5.0	P

Comments:

FORM XI - IN

7/87

U.S. EPA - CLP

11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WESTON - LIONVILLE Contract:

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: Date: 11/15/89

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			5.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury	253.70		0.2	0.2	CV
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:

FORM XI - IN

7/8

U.S. EPA - CLP

11
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WESTON - LIONVILLE Contract: 68-W8-5700

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: Date: 10/15/89

Flame AA ID Number:

Furnace AA ID Number: AA2

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic	193.70	BZ	10.0	1.0	F
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.30	BZ	5.0	1.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium	196.00	BZ	5.0	2.0	F
Silver			10.0		
Sodium			5000.0		
Thallium	276.80	BZ	10.0	2.0	F
Vanadium			50.0		
Zinc			20.0		

Comments:

FORM XI - IN

U.S. EPA - CLP

11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WESTON - LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: Date: 10/15/89

Flame AA ID Number:

Furnace AA ID Number: AA3

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.30	BD	5.0	1.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium	276.80	BD	10.0	1.0	F
Vanadium			50.0		
Zinc			20.0		

Comments:

FORM XI - IN

7/87

U.S. EPA - CLP

11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WESTON - LIONVILLE

Contract: 68-W8-0057

Lab Code: WESTON

Case No.: CHLOR

SAS No.:

SDG No.: CLP253

ICP ID Number:

Date: 10/15/89

Flame AA ID Number:

Furnace AA ID Number: AA4

Analyte	Wavelength (nm)	Background	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic	193.70	BZ	10.0	2.0	F
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.30	BZ	5.0	3.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium	196.00	BZ	5.0	2.0	F
Silver			10.0		
Sodium			5000.0		
Thallium	276.60	BZ	10.0	4.0	F
Vanadium			50.0		
Zinc			20.0		

Comments:

FORM XI - IN

7/87

U.S. EPA - CLP

11

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WESTON-LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: Date: 05/30/90

Flame AA ID Number:

Furnace AA ID Number: AA1

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic	193.70	BZ	10.0	1.0	F
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead	283.30	BZ	5.0	1.0	F
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium	196.00	BZ	5.0	1.0	F
Silver			10.0		
Sodium			5000.0		
Thallium	276.80	BZ	10.0	1.0	F
Vanadium			50.0		
Zinc			20.0		

Comments:

FORM XI - IN 7/87

U.S. EPA - CLP

11
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: WESTON - LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: Date: 10/15/89

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200.0		
Antimony			60.0		
Arsenic			10.0		
Barium			200.0		
Beryllium			5.0		
Cadmium			5.0		
Calcium			5000.0		
Chromium			10.0		
Cobalt			50.0		
Copper			25.0		
Iron			100.0		
Lead			5.0		
Magnesium			5000.0		
Manganese			15.0		
Mercury			0.2		
Nickel			40.0		
Potassium			5000.0		
Selenium			5.0		
Silver			10.0		
Sodium			5000.0		
Thallium			10.0		
Vanadium			50.0		
Zinc			20.0		

Comments:
CYANIDE INSTRUMENT

FORM XIII - IN 7/87

U.S. EPA - CLP

12A
ICP INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: WESTON Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: ICP61 Date: 11/15/89

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	AS
Aluminum	308.20					
Antimony	206.80			0.0002000		
Arsenic	193.70	0.0041000		0.0033000		
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80					-0.0046000
Calcium	317.90					
Chromium	267.70			0.0001000		
Cobalt	228.60					
Copper	324.70			-0.0001000		
Iron	259.90					
Lead	283.30					
Magnesium	279.00					
Manganese	257.60			-0.0005000		
Mercury	253.70					
Nickel	231.60					
Potassium	766.40					
Selenium	196.00					
Silver	328.00			-0.0003300		
Sodium	588.90					
Thallium	276.80			0.0005000	0.0080000	
Vanadium	292.40			0.0002000		
Zinc	213.80			0.0002000		

Comments:

FORM XII (PART 1) - IN 7/87

U.S. EPA - CLP

12A
ICP INTERELEMENT CORRECTION FACTORS (QUARTERLY)

Lab Name: WESTON Contract: 68-W8-0057

Lab Code: Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: Date: 08/15/89

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Magnesium						
Manganese						
Mercury						
Nickel						
Potassium						
Selenium						
Silver						
Sodium						
Thallium						
Vanadium						
Zinc						

Comments:

FORM XII (PART 1) - IN

7/8/035

U.S. EPA - CLP

13
ICP LINEAR RANGE (QUARTERLY)

Lab Name: WESTON - LIONVILLE Contract: 68-W8-0057

Lab Code: WESTON Case No.: CHLOR SAS No.: SDG No.: CLP253

ICP ID Number: ICP61 Date: 08/15/89

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	3.30	700000.0	
Antimony	3.30	60000.0	
Arsenic	3.30		NR
Barium	3.30	200000.0	
Beryllium	3.30	12500.0	
Cadmium	3.30	12500.0	
Calcium	3.30	1000000.0	
Chromium	3.30	50000.0	
Cobalt	3.30	125000.0	
Copper	3.30	62500.0	
Iron	3.30	500000.0	
Lead	3.30		NR
Magnesium	3.30	900000.0	
Manganese	3.30	75000.0	
Mercury			NR
Nickel	3.30	100000.0	
Potassium	3.30	1000000.0	
Selenium	3.30		NR
Silver	3.30	5000.0	
Sodium	3.30	1000000.0	
Thallium	3.30		NR
Vanadium	3.30	100000.0	
Zinc	3.30	50000.0	

Comments:

METALS BY ICP

Standardization Rpt.

Thu 08-09-90 01:23:28 PM

Standard: cal blank

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Avge	.0012	-.0979	.0001	.0006	.0073	-.0001	.0011
SDev	.0006	.0010	.0001	.0000	.0010	.0003	.0005
%RSD	50.00	-1.028	86.60	.0000	12.89	-458.3	78.06
#1	.0006	-.0970	.0000	.0006	.0070	-.0004	.0008
#2	.0012	-.0990	.0002	.0006	.0066	.0000	.0004
#3	.0018	-.0978	.0002	.0006	.0084	.0002	.0020

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Avge	.0003	.0003	.0061	.0166	.6715	.0001	.4039
SDev	.0004	.0003	.0008	.0005	.0031	.0001	.0022
%RSD	124.9	91.65	12.35	3.188	.4618	173.2	.5521
#1	.0000	.0000	.0058	.0172	.6684	.0000	.4014
#2	.0002	.0004	.0056	.0164	.6746	.0000	.4048
#3	.0008	.0006	.0070	.0162	.6714	.0002	.4056

Elem	Ni2316	Sb2068	V-2924	Zn2138
Avge	-.0001	-.0002	.1179	.0002
SDev	.0042	.0011	.0006	.0000
%RSD	-3169.	-529.2	.5451	.0000
#1	-.0046	-.0006	.1172	.0002
#2	.0038	.0010	.1184	.0002
#3	.0004	-.0010	.1182	.0002

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Standardization Rpt.

Thu 08-09-90 01:25:45 PM

Standard: STD1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Avge	.1533	-.0635	.0006	.1958	.0143	.0949	2.914
SDev	.0027	.0047	.0002	.0032	.0005	.0013	.044
%RSD	1.752	-7.406	33.33	1.644	3.512	1.403	1.521
#1	.1502	-.0588	.0008	.1922	.0148	.0934	2.863
#2	.1552	-.0634	.0006	.1984	.0144	.0958	2.941
#3	.1544	-.0682	.0004	.1968	.0138	.0956	2.938

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Avge	.4876	.4483	3.671	.0175	.6659	.3189	.3886
SDev	.0064	.0078	.050	.0018	.0036	.0049	.0049
%RSD	1.302	1.746	1.373	10.00	.5375	1.542	1.264
#1	.4804	.4394	3.613	.0194	.6620	.3132	.3844
#2	.4924	.4540	3.704	.0160	.6668	.3220	.3874
#3	.4900	.4516	3.696	.0170	.6690	.3214	.3940

Elem	Ni2316	Sb2068	V-2924	Zn2138
Avge	.9837	.3211	1.851	.5891
SDev	.0142	.0049	.033	.0091
%RSD	1.439	1.531	1.761	1.550
#1	.9674	.3156	1.814	.5786
#2	.9924	.3228	1.872	.5940
#3	.9914	.3250	1.868	.5948

Standardization Rpt.

Thu 08-09-90 01:28:12 PM

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Standard: STD2

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Avge	.0009	2.385	3.602	.0009	22.00	.0001	.0127
SDev	.0003	.010	.016	.0002	.11	.0004	.0023
%RSD	35.25	.4349	.4414	26.65	.4924	624.5	17.96
#1	.0012	2.373	3.586	.0010	21.90	-.0004	.0152
#2	.0006	2.392	3.618	.0010	22.11	.0004	.0108
#3	.0008	2.389	3.602	.0006	21.98	.0002	.0120

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588?
Avge	.0033	.0027	.0112	.1932	14.35	.0006	8.081
SDev	.0004	.0010	.0050	.0002	.07	.0004	.049
%RSD	12.49	37.00	44.43	.1035	.4839	57.74	.6092
#1	.0038	.0038	.0166	.1934	14.28	.0010	8.027
#2	.0030	.0022	.0102	.1930	14.42	.0004	8.122
#3	.0032	.0020	.0068	.1932	14.36	.0004	8.096

Elem	Ni2316	Sb2068	V-2924	Zn2138
Avge	.0017	.0008	.1217	.0043
SDev	.0011	.0011	.0020	.0018
%RSD	65.61	132.3	1.621	41.37
#1	.0030	.0016	.1240	.0064
#2	.0008	-.0004	.1208	.0034
#3	.0014	.0012	.1204	.0032

Analysis Report Thu 08-09-90 01:34:59 PM page

Method: HSL1 Sample Name: ICV Operator: ALM
Run Time: 08/09/90 13:32:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	475.3	5012.	4989.	251.9	24760.	237.5	2525.
SDev	3.8	48.	37.	1.8	153.	4.3	18.
%RSD	.7980	.9674	.7363	.7143	.6162	1.791	.7023
#1	470.9	4958.	4954.	250.0	24590.	235.1	2508.
#2	477.5	5025.	4986.	252.0	24810.	242.5	2523.
#3	477.5	5052.	5027.	253.6	24880.	235.1	2543.

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	495.1	1268.	4976.	25350.	25100.	737.5	25480.
SDev	3.3	9.	33.	327.	175.	4.3	204.
%RSD	.6632	.7486	.6717	1.290	.6970	.5851	.8018
#1	491.9	1257.	4946.	25540.	24910.	733.7	25320.
#2	495.1	1272.	4970.	25540.	25130.	736.5	25420.
#3	498.4	1275.	5012.	24970.	25250.	742.2	25710.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	1948.	3002.	2497.	1002.
SDev	19.	6.	18.	7.
%RSD	.9614	.2157	.7298	.6923
#1	1949.	3006.	2476.	994.3
#2	1928.	3006.	2504.	1005.
#3	1966.	2995.	2510.	1007.

Analysis Report

Thu 08-09-90 01:37:12 PM

Method: HSL1 Sample Name: ICB
Run Time: 08/09/90 13:35:17 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.8752	4.028	2.591	.3415	9.397	.0000	.7004
SDev	2.003	5.483	1.950	.5916	7.573	1.216	2.140
%RSD	228.9	136.1	75.25	173.2	80.58	.0000	305.5
#1	2.625	2.148	4.627	1.025	17.89	-.7018	.2335
#2	1.311	-.2685	2.406	.0000	6.972	-.7018	3.035
#3	-1.310	10.20	.7403	.0000	3.335	1.404	-1.167

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2735	5.207	3.820	94.38	9.745	.6272	46.46
SDev	1.034	1.705	4.411	290.6	11.24	.0022	18.71
%RSD	377.9	32.74	115.5	307.9	115.3	.3516	40.27
#1	1.369	7.067	8.913	169.9	17.30	.6297	60.35
#2	-.6849	4.834	1.273	-226.5	15.11	.6259	53.84
#3	.1368	3.719	1.273	339.8	-3.167	.6259	25.18

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	7.860	27.40	1.346	1.359
SDev	7.757	14.14	1.998	1.359
%RSD	98.68	51.63	148.5	100.0
#1	2.981	33.62	3.653	2.718
#2	3.795	37.36	.1918	1.359
#3	16.80	11.21	.1918	-.0003

Analysis Report

Thu 08-09-90 01:39:23 PM page

Method: HSL1 Sample Name: ISA
Run Time: 08/09/90 13:37:28 Operator: ALM
Comment: ICSAI
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.033	497500.	16.47	.5123	463500.	-2.807	8.638
SDev	3.652	4173.	.32	.0000	5537.	2.785	.700
%RSD	90.56	.8389	1.946	.0000	1.195	-99.22	8.108
#1	.0175	493500.	16.29	.5123	457300.	-3.860	8.638
#2	4.924	501800.	16.84	.5123	468100.	.3509	9.339
#3	7.156	497100.	16.29	.5123	465000.	-4.912	7.938

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.231	-5.018	180400.	-868.3	487500.	-63.94	11.72
SDev	1.803	1.034	1486.	1169.2	5783.	6.72	48.34
%RSD	80.83	-20.61	.8237	-134.7	1.186	-10.51	412.4
#1	1.978	-4.060	178800.	-2208.	481000.	-56.28	-38.64
#2	4.148	-4.880	181800.	-339.8	491900.	-68.87	16.06
#3	.5678	-6.114	180600.	-56.62	489600.	-66.65	57.74

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	-11.93	79.73	54.09	-9.788
SDev	8.35	27.12	4.76	.656
%RSD	-69.98	34.01	8.807	-6.697
#1	-2.710	87.52	48.87	-9.247
#2	-14.09	49.57	55.19	-10.52
#3	-18.97	102.1	58.20	-9.601

Analysis Report

Thu 08-09-90 01:42:17 PM pag

Method: HSL1 Sample Name: ISB
Run Time: 08/09/90 13:40:21 Operator: ALM
Comment: ICSABI
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1032.	499700.	496.0	442.3	470700.	971.9	463.5
SDev	3.	1580.	2.5	2.1	1894.	8.6	2.3
%RSD	.3191	.3162	.5130	.4681	.4024	.8865	.4954
#1	1031.	497900.	493.8	440.1	468700.	969.8	463.2
#2	1029.	501000.	495.5	442.6	471200.	964.6	461.4
#3	1035.	500100.	498.8	444.2	472400.	981.4	466.0

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	442.0	478.2	182000.	-226.5	494300.	384.6	38.21
SDev	1.3	4.9	508.	392.3	2061.	1.7	1.30
%RSD	.3012	1.022	.2792	-173.2	.4169	.4307	3.409
#1	442.6	474.8	181400.	-679.5	492000.	383.0	38.21
#2	442.9	476.0	182400.	.0001	496000.	386.3	36.90
#3	440.4	483.8	182200.	.0001	494900.	384.3	39.51

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	856.8	69.45	521.4	927.7
SDev	6.7	5.62	2.9	5.3
%RSD	.7768	8.091	.5520	.5762
#1	864.1	64.58	518.1	923.7
#2	855.1	75.60	523.3	925.5
#3	851.1	68.16	522.8	933.7

Analysis Report

Thu 08-09-90 01:45:03 PM

Method: HSL1 Sample Name: CRI
Run Time: 08/09/90 13:43:07
Comment:
Mode: CONC Corr. Factor: 1

Operator: ALM

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	19.33	376.7	200.1	10.42	1209.	10.53	104.1
SDev	2.01	121.8	1.7	.30	129.	1.61	1.8
%RSD	10.40	32.33	.8326	2.839	10.69	15.28	1.693
#1	19.79	516.1	198.4	10.76	1357.	8.772	102.5
#2	21.06	323.6	200.1	10.25	1151.	11.93	106.0
#3	17.13	290.5	201.7	10.25	1119.	10.88	103.9

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	16.54	62.13	305.2	585.1	1174.	30.79	936.1
SDev	3.96	2.33	76.4	142.5	167.	.04	16.8
%RSD	23.97	3.747	25.03	24.35	14.22	.1241	1.795
#1	14.89	64.00	393.1	566.3	1366.	30.83	917.4
#2	21.06	62.87	268.1	453.0	1098.	30.77	940.8
#3	13.67	59.53	254.5	736.1	1059.	30.77	950.0

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	85.65	135.7	93.39	52.06
SDev	2.48	18.4	1.23	3.85
%RSD	2.900	13.59	1.319	7.397
#1	83.48	126.9	92.38	56.35
#2	88.36	156.8	94.76	50.94
#3	85.11	123.2	93.04	48.90

Analysis Report

Thu 08-09-90 01:47:19 PM

Method: HSL1 Sample Name: 90L0877-MB1 Operator: ALM
Run Time: 08/09/90 13:45:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.197	14.23	-.3702	.1708	15.46	-2.105	-1.40
SDev	2.006	11.19	.5553	.5916	7.25	2.649	1.61
%RSD	91.31	78.64	-150.0	346.4	46.91	-125.8	-115.5
#1	2.639	21.48	.1851	-.5123	21.52	-4.912	-.466
#2	3.944	19.87	-.3702	.5123	17.43	-1.754	-.466
#3	.0067	1.343	-.9254	.5123	7.427	.3509	-3.268

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5514	.3755	36.02	-188.8	115.5	-.2946	165.0
SDev	.6271	1.116	15.83	943.0	25.7	.0079	28.6
%RSD	-113.7	297.3	43.95	-499.6	22.23	-2.686	17.32
#1	-.6900	.3771	52.02	566.3	142.3	-.2866	197.1
#2	.1334	1.491	35.65	-1246.	113.0	-.2948	155.4
#3	-1.098	-.7417	20.37	113.3	91.12	-.3024	142.4

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	2.168	22.41	10.76	2.712
SDev	4.066	17.12	2.33	1.175
%RSD	187.5	76.39	21.61	43.31
#1	-1.897	26.14	12.87	4.069
#2	6.234	37.35	11.15	2.032
#3	2.168	3.732	8.267	2.036

Analysis Report

Thu 08-09-90 01:49:57 PM page

Method: HSL1 Sample Name: 90L0877-LC1
Run Time: 08/09/90 13:48:01 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	475.3	4873.	4947.	247.3	24830.	235.4	2500.
SDev	6.6	28.	23.	1.1	189.	4.3	15.
%RSD	1.390	.5845	.4699	.4313	.7604	1.807	.5945
#1	468.3	4852.	4936.	246.4	24640.	233.0	2492.
#2	476.2	4861.	4931.	246.9	24850.	233.0	2491.
#3	481.4	4905.	4974.	248.5	25010.	240.4	2517.

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	489.5	1230.	4941.	24970.	24690.	729.3	24200.
SDev	1.7	12.	29.	204.	179.	3.8	218.
%RSD	.3489	1.010	.5807	.8176	.7268	.5217	.9014
#1	488.2	1219.	4923.	25030.	24510.	727.1	24000.
#2	489.0	1228.	4925.	24750.	24710.	727.1	24160.
#3	491.4	1244.	4974.	25140.	24860.	733.7	24430.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	1927.	3017.	2474.	997.5
SDev	3.	4.	16.	6.8
%RSD	.1706	.1236	.6369	.6822
#1	1928.	3017.	2457.	991.0
#2	1928.	3014.	2476.	997.1
#3	1923.	3021.	2488.	1005.

Analysis Report

Thu 08-09-90 01:52:55 PM

Method: HSL1 Sample Name: 90L0877-LC2 Operator: ALM
Run Time: 08/09/90 13:50:59
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	477.5	4892.	4945.	247.4	24880.	237.5	2494.
SDev	3.5	24.	36.	1.8	166.	1.6	10.
%RSD	.7282	.4852	.7327	.7465	.6680	.6769	.4015
#1	481.4	4919.	4984.	249.5	25060.	237.2	2505.
#2	474.9	4879.	4936.	246.9	24830.	239.3	2492.
#3	476.2	4877.	4913.	245.9	24740.	236.1	2485.

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	490.1	1243.	4931.	24820.	24840.	727.1	24530
SDev	3.0	9.	34.	229.	135.	3.3	125
%RSD	.6173	.7634	.6972	.9220	.5430	.4488	.5094
#1	493.5	1253.	4965.	25080.	24990.	730.9	24620
#2	489.0	1244.	4932.	24690.	24810.	725.3	24580
#3	487.8	1234.	4897.	24690.	24730.	725.3	24390.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	1924.	3049.	2478.	992.8
SDev	14.	11.	11.	6.2
%RSD	.7035	.3744	.4575	.6209
#1	1939.	3051.	2491.	999.8
#2	1914.	3036.	2471.	988.2
#3	1918.	3059.	2472.	990.3

Analysis Report

Thu 08-09-90 01:55:45 PM

Method: HSL1 Sample Name: 9008L257-001
Run Time: 08/09/90 13:53:49 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.384	3659.	62.93	1.025	17670.	1.053	5.603
SDev	3.024	41.	.00	.000	216.	1.216	2.140
%RSD	218.5	1.125	.0000	.0000	1.220	115.5	38.19
#1	3.091	3614.	62.93	1.025	17420.	2.456	7.938
#2	-2.107	3666.	62.93	1.025	17760.	.3509	5.136
#3	3.168	3696.	62.93	1.025	17820.	.3509	3.735

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.596	22.15	9490.	3171.	11620.	228.3	62240.
SDev	.939	1.28	118.	653.	115.	2.4	711.
%RSD	9.788	5.768	1.243	20.59	.9932	1.060	1.142
#1	9.061	23.62	9366.	3681.	11490.	225.7	61430.
#2	9.047	21.40	9504.	2435.	11650.	228.6	62520.
#3	10.68	21.41	9601.	3398.	11720.	230.5	62770.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	11.38	19.27	17.99	64.73
SDev	1.88	11.40	.73	.02
%RSD	16.50	59.15	4.070	.0364
#1	13.55	16.81	18.83	64.75
#2	10.30	9.306	17.60	64.73
#3	10.30	31.70	17.54	64.71

Analysis Report Thu 08-09-90 01:57:54 PM pao

Method: HSL1 Sample Name: 9008L257-002 Operator: ALM
Run Time: 08/09/90 13:55:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.8837	33.56	.7403	.3415	87.15	1.404	-.933
SDev	1.996	16.82	.5553	.2958	36.89	2.105	.808
%RSD	225.9	50.11	75.00	86.60	42.33	150.0	-86.60
#1	-1.293	41.62	1.296	.0000	129.7	-.7018	-1.86
#2	1.317	44.84	.1851	.5123	66.54	1.404	-.466
#3	2.628	14.23	.7403	.5123	65.18	3.509	-.4669

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.051	9.672	29.65	377.5	-26.31	.9527	89.00
SDev	1.036	1.289	20.32	488.2	27.44	.5516	152.5
%RSD	50.50	13.33	68.54	129.3	-104.3	57.90	171.4
#1	.9534	10.42	53.11	906.0	3.411	1.590	264.8
#2	2.189	10.41	18.19	-56.62	-31.67	.6344	9.552
#3	3.011	8.183	17.64	283.1	-50.67	.6341	-7.381

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	4.608	24.90	-8.297	23.79
SDev	7.042	8.63	.885	.00
%RSD	152.8	34.67	-10.66	.0171
#1	.5421	14.93	-8.504	23.78
#2	.5421	29.88	-7.328	23.79
#3	12.74	29.88	-9.060	23.79

Analysis Report

Thu 08-09-90 02:00:17 PM

Method: HSL1 Sample Name: 9008L257-003 Operator: ALM
Run Time: 08/09/90 13:58:21
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10.82	92440.	485.7	10.25	28230.	4.211	69.57
SDev	3.49	531.	3.2	.00	110.	2.191	2.80
%RSD	32.26	.5743	.6601	.0000	.3896	52.04	4.027
#1	12.81	92020.	483.8	10.25	28170.	3.509	72.37
#2	6.793	93040.	489.4	10.25	28360.	2.456	66.77
#3	12.87	92270.	483.8	10.25	28170.	6.667	69.57

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	176.3	74.95	210200.	19540.	24270.	3250.	80760.
SDev	2.2	1.04	890.	588.	99.	11.	576.
%RSD	1.255	1.381	.4235	3.012	.4075	.3464	.7135
#1	178.9	76.00	209600.	20220.	24230.	3242.	80470.
#2	175.4	73.93	211300.	19200.	24380.	3263.	81430.
#3	174.7	74.90	209800.	19200.	24200.	3247.	80390.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	94.86	58.82	499.1	414.1
SDev	2.44	3.90	1.8	.7
%RSD	2.571	6.629	.3575	.1655
#1	97.30	62.67	500.0	413.6
#2	94.86	54.88	500.2	413.9
#3	92.42	58.90	497.0	414.9

Analysis Report

Thu 08-09-90 02:02:41 PM pag

Method: HSL1 Sample Name: 9008L257-004 Operator: ALM
Run Time: 08/09/90 14:00:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4017	60.95	1.111	.5123	70.03	-.7018	.4669
SDev	2.0088	34.10	.321	.0000	11.21	2.1053	3.857
%RSD	-500.1	55.95	28.87	.0000	16.02	-300.0	826.1
#1	.0613	99.62	1.296	.5123	82.91	-.7018	4.436
#2	1.335	48.06	1.296	.5123	64.72	1.404	.2335
#3	-2.602	35.18	.7403	.5123	62.45	-2.807	-3.26

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.633	5.589	107.0	94.38	-3.167	1.929	138.5
SDev	1.705	1.710	68.5	32.69	18.961	1.466	50.8
%RSD	104.4	30.59	64.04	34.64	-598.7	75.98	36.68
#1	2.994	7.084	185.7	113.3	18.03	3.532	197.1
#2	2.184	5.957	73.85	56.63	-18.52	1.600	111.1
#3	-.2800	3.725	61.30	113.3	-9.014	.6559	107.2

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	2.439	11.19	-4.878	13.12
SDev	4.011	17.11	1.177	2.37
%RSD	164.4	153.0	-24.13	18.10
#1	-.2710	26.11	-3.962	15.60
#2	.5421	-7.486	-6.206	12.90
#3	7.047	14.93	-4.465	10.87

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Method: HSL1 Sample Name: CCV Operator: ALM
Run Time: 08/09/90 14:04:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	462.2	4903.	4892.	248.3	24500.	233.3	2495.
SDev	2.0	10.	26.	1.2	105.	3.7	9.
%RSD	.4342	.2138	.5320	.4765	.4275	1.584	.3602
#1	461.7	4893.	4912.	249.0	24470.	233.0	2497.
#2	464.4	4914.	4901.	249.0	24620.	237.2	2502.
#3	460.4	4902.	4863.	246.9	24410.	229.8	2485.

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	488.2	1237.	4935.	24630.	24930.	727.8	24970.
SDev	1.5	6.	18.	204.	87.	3.3	118.
%RSD	.3031	.4966	.3577	.8289	.3483	.4537	.4723
#1	488.6	1231.	4946.	24860.	24860.	728.1	24950.
#2	489.4	1244.	4945.	24460.	25030.	730.9	25090.
#3	486.5	1237.	4915.	24580.	24910.	724.3	24860.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	1919.	2954.	2472.	990.0
SDev	9.	29.	12.	2.2
%RSD	.4887	.9878	.5035	.2210
#1	1918.	2920.	2462.	987.5
#2	1928.	2973.	2486.	990.9
#3	1910.	2969.	2467.	991.6

Analysis Report

Thu 08-09-90 02:08:12 PM

Method: HSL1 Sample Name: CCB
Run Time: 08/09/90 14:06:16 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co22E
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.193	2.417	2.961	.1708	23.19	2.105	.4669
SDev	2.732	10.70	3.377	.2958	14.77	.608	2.140
%RSD	124.6	442.6	114.1	173.2	63.67	28.87	458.3
#1	5.255	8.592	6.848	.5123	40.17	1.404	2.335
#2	1.317	8.592	1.296	.0000	16.07	2.456	-1.86L
#3	.0056	-9.935	.7403	.0000	13.34	2.456	.9339

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4132	3.721	23.65	-585.1	52.14	.0118	96.82
SDev	1.3201	2.232	10.41	311.9	36.19	.5467	49.79
%RSD	-319.4	59.99	44.03	-53.30	69.42	4624.	51.42
#1	.5443	5.954	35.65	-792.8	93.31	.6431	154.1
#2	.1351	3.721	18.19	-736.1	37.76	-.3035	64.26
#3	-1.919	1.489	17.10	-226.5	25.34	-.3041	72.07

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	1.897	6.221	3.837	1.355
SDev	2.347	20.58	4.368	1.176
%RSD	123.7	330.7	113.8	86.82
#1	4.608	-7.478	8.836	2.032
#2	.5421	-3.739	1.915	2.036
#3	.5421	29.88	.7599	-.0034

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-02216

Analysis Report Thu 08-09-90 02:11:19 PM page 1

Method: HSL1 Sample Name: 9008L257-006 Operator: ALM
Run Time: 08/09/90 14:09:24
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.305	29.00	6.478	.1708	18280.	.7018	.7004
SDev	1.311	10.97	.321	.2958	240.	.6077	1.070
%RSD	-100.5	37.82	4.949	173.2	1.312	86.60	152.8
#1	-2.615	16.65	6.848	.5123	18510.	.3509	-.4669
#2	.0062	37.59	6.293	.0000	18310.	1.404	.9339
#3	-1.305	32.76	6.293	.0000	18030.	.3509	1.634

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.737	7.068	19.10	2963.	11470.	190.7	59010.
SDev	2.407	1.116	.63	143.	140.	2.9	808.
%RSD	87.95	15.78	3.299	4.809	1.218	1.502	1.369
#1	.9567	5.952	19.83	2945.	11600.	193.8	59930.
#2	1.779	8.183	18.74	2831.	11480.	190.1	58640.
#3	5.476	7.067	18.74	3114.	11330.	188.2	58450.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	4.337	2.487	-10.41	37.39
SDev	1.693	2.157	2.03	.68
%RSD	39.03	86.73	-19.49	1.818
#1	6.234	3.732	-12.53	38.07
#2	2.981	-.0037	-10.22	37.39
#3	3.795	3.732	-8.483	36.71

Analysis Report Thu 08-09-90 02:13:28 PM page

Method: HSL1 Sample Name: 9008L257-007 Operator: ALM
Run Time: 08/09/90 14:11:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.744	53.97	.7403	.1708	81.09	.7018	-.2335
SDev	.757	6.51	.5553	.2958	19.40	.6077	.4044
%RSD	-43.43	12.06	75.00	173.2	23.93	86.60	-173.2
#1	-1.306	57.73	1.296	.0000	103.4	1.404	.2335
#2	-1.308	57.73	.7403	.5123	72.00	.3509	-.4669
#3	-2.619	46.45	.1851	.0000	67.90	.3509	-.4669

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.779	7.067	11.64	-151.0	6.822	.9437	30.39
SDev	4.269	1.116	3.78	214.4	7.815	1.084	65.48
%RSD	240.0	15.79	32.48	-142.0	114.6	114.9	215.4
#1	6.709	7.067	16.01	.0001	15.84	1.571	105.9
#2	-.6857	8.182	9.459	-56.62	1.949	1.568	-9.986
#3	-.6857	5.951	9.459	-396.4	2.680	-.3079	-4.776

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	.5421	1.243	-11.56	28.55
SDev	.0000	7.776	.33	1.18
%RSD	.0000	625.7	-2.875	4.121
#1	.5421	3.732	-11.37	29.23
#2	.5421	-7.473	-11.94	29.23
#3	.5421	7.469	-11.37	27.19

Analysis Report

Thu 08-09-90 02:15:52 PM page

Method: HSL1 Sample Name: 9008L257-008
Run Time: 08/09/90 14:13:56 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4400	13.16	.9254	.0000	41.38	1.754	.9339
SDev	2.002	5.12	.3206	.0000	2.24	2.191	1.213
%RSD	455.1	38.88	34.64	.0000	5.421	124.9	129.9
#1	.0031	10.20	.7403	.0000	38.80	3.509	-.4669
#2	2.625	19.06	1.296	.0000	42.90	2.456	1.634
#3	-1.308	10.20	.7403	.0000	42.44	-.7018	1.634

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.6839	5.951	9.095	-226.5	-58.23	.0045	26.92
SDev	1.186	.000	.315	612.5	6.63	1.083	13.05
%RSD	173.4	.0005	3.464	-270.4	-11.39	23820.	48.47
#1	1.369	5.951	9.459	283.1	-57.25	.6300	31.69
#2	1.369	5.951	8.913	-56.62	-52.14	.6297	36.90
#3	-.6857	5.951	8.913	-906.0	-65.29	-1.246	12.16

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	10.30	3.735	-10.40	24.93
SDev	5.86	22.72	1.33	.79
%RSD	56.93	608.4	-12.82	3.149
#1	3.795	14.94	-9.633	24.48
#2	15.18	-22.41	-9.633	24.48
#3	11.93	18.68	-11.94	25.84

Analysis Report

Thu 08-09-90 02:18:08 PM

Method: HSL1 Sample Name: 9008L257-009
Run Time: 08/09/90 14:16:12 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co22E
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-3.921	33.56	18.14	.1708	18180.	1.404	3.502
SDev	1.311	7.16	.32	.2958	100.	1.053	1.618
%RSD	-33.43	21.33	1.767	173.2	.5522	75.00	46.19
#1	-5.232	31.15	18.51	.5123	18300.	1.404	4.436
#2	-2.610	41.62	17.95	.0000	18140.	.3509	4.436
#3	-3.921	27.93	17.95	.0000	18110.	2.456	1.634

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.8182	4.838	35.65	3341.	10910.	917.3	82640
SDev	1.034	1.116	.00	150.	57.	6.7	379
%RSD	126.4	23.06	.0000	4.484	.5260	.7254	.4589
#1	-.2775	4.838	35.65	3454.	10980.	924.4	82970.
#2	1.777	5.954	35.65	3171.	10900.	916.0	82710.
#3	.9551	3.722	35.65	3398.	10870.	911.3	82220.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	2.981	-2.498	-9.841	49.62
SDev	2.817	20.575	.667	1.18
%RSD	94.48	-823.8	-6.778	2.373
#1	-.2710	7.464	-10.23	50.30
#2	4.608	11.20	-10.23	50.30
#3	4.608	-26.16	-9.071	48.26

Analysis Report

Thu 08-09-90 02:20:51 PM

Method: HSL1 Sample Name: 9008L253-001 Operator: ALM
Run Time: 08/09/90 14:18:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.711	18.80	68.48	.5123	12760.	.3509	1.868
SDev	.696	1.68	.00	.0000	75.	1.053	2.831
%RSD	40.66	8.921	.0000	.0000	.5876	300.0	151.6
#1	2.079	18.26	68.48	.5123	12710.	1.404	2.335
#2	2.146	20.68	68.48	.5123	12730.	.3509	4.436
#3	.9087	17.45	68.48	.5123	12840.	-.7018	-1.167

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.802	5.638	30340.	2567.	4587.	313.4	3311.
SDev	1.187	1.932	213.	621.	17.	3.1	17.
%RSD	-65.87	34.27	.7025	24.20	.3602	.9940	.5239
#1	-2.466	4.501	30130.	1869.	4579.	311.1	3326.
#2	-.4317	7.868	30340.	3058.	4576.	312.2	3292.
#3	-2.508	4.544	30560.	2775.	4606.	317.0	3315.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	2.439	-1.088	-12.62	67.36
SDev	3.667	8.628	1.78	1.21
%RSD	150.3	-793.1	-14.11	1.803
#1	2.168	-6.027	-11.53	68.76
#2	6.234	8.875	-11.66	66.68
#3	-1.084	-6.112	-14.68	66.63

Analysis Report Thu 08-09-90 02:24:39 PM page

Method: HSL1 Sample Name: 9008L253-001 L Operator: ALM
Run Time: 08/09/90 14:22:43 alm 8/9/90
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.535	29.81	13.70	.0000	2523.	-.3509	.4669
SDev	.759	17.36	.32	.0000	6.	.6077	2.140
%RSD	-49.44	58.24	2.341	.0000	.2352	-173.2	458.3
#1	-1.974	11.81	13.51	.0000	2517.	.3509	-1.868
#2	-1.971	31.15	14.07	.0000	2525.	-.7018	.9339
#3	-.6585	46.45	13.51	.0000	2528.	-.7018	2.335

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0464	3.197	5942.	151.0	841.0	61.43	592.6
SDev	.4101	.001	8.	182.0	7.4	.55	6.4
%RSD	-883.4	.0242	.1303	120.5	.8820	.8873	1.084
#1	-.4564	3.197	5934.	226.5	842.5	60.80	597.0
#2	-.0466	3.198	5944.	-56.62	833.0	61.75	595.7
#3	.3637	3.198	5949.	283.1	847.6	61.75	585.3

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	-7.860	1.302	-11.46	23.97
SDev	7.555	14.14	1.00	1.18
%RSD	-96.12	1086.	-8.699	4.912
#1	-10.03	-8.658	-12.03	23.29
#2	.5421	-4.924	-12.04	25.33
#3	-14.09	17.49	-10.31	23.29

Analysis Report Thu 08-09-90 02:27:54 PM page 1

Method: HSL1 Sample Name: 9008L253-001R Operator: ALM
Run Time: 08/09/90 14:25:58
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.8850	24.97	69.41	.0000	12860.	2.105	1.751
SDev	2.0363	9.94	.32	.0000	71.	3.039	.729
%RSD	-230.1	39.81	.4619	.0000	.5504	144.3	41.63
#1	.9159	16.65	69.59	.0000	12940.	.3509	2.335
#2	-3.095	22.29	69.04	.0000	12850.	5.614	1.984
#3	-.4762	35.98	69.59	.0000	12800.	.3509	.9339

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.810	5.273	30420.	3039.	4594.	314.7	3217.
SDev	.626	.630	139.	182.	25.	2.0	18.
%RSD	-34.57	11.95	.4580	5.990	.5388	.6417	.5674
#1	-1.689	4.546	30580.	3114.	4622.	317.0	3235.
#2	-2.487	5.638	30350.	3171.	4574.	313.1	3218.
#3	-1.253	5.637	30340.	2831.	4586.	314.0	3198.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	3.252	17.58	-16.13	92.95
SDev	.469	10.81	1.84	1.06
%RSD	14.43	61.52	-11.43	1.145
#1	3.795	5.091	-18.16	91.79
#2	2.981	23.82	-15.70	93.87
#3	2.981	23.82	-14.54	93.19

Analysis Report

Thu 08-09-90 02:32:46 PM

Method: HSL1 Sample Name: 9008L253-001S
Run Time: 08/09/90 14:30:49 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co22[illegible]
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	45.77	2097.	2116.	50.03	63880.	48.07	522.[illegible]
SDev	1.96	9.	11.	.30	338.	1.22	3.[illegible]
%RSD	4.289	.4318	.5394	.5911	.5293	2.529	.5697
#1	47.91	2087.	2102.	49.69	63550.	48.77	520.[illegible]
#2	45.35	2099.	2121.	50.20	64220.	48.77	521.7
#3	44.05	2105.	2123.	50.20	63860.	46.67	526.2

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	196.2	271.1	26140.	55210.	56470.	796.5	55590
SDev	1.4	1.3	122.	503.	272.	4.0	325
%RSD	.7294	.4796	.4660	.9116	.4815	.4978	.5850
#1	194.8	269.6	26000.	55380.	56160.	792.1	55220.
#2	196.4	271.9	26190.	54640.	56670.	797.8	55710.
#3	197.6	271.9	26230.	55610.	56590.	799.7	55830.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	502.5	550.1	509.4	583.1
SDev	5.2	4.3	1.8	3.1
%RSD	1.040	.7824	.3502	.5344
#1	496.5	547.7	507.4	579.5
#2	504.7	555.1	510.1	584.9
#3	506.3	547.6	510.7	584.9

AR302224

Analysis Report

Thu 08-09-90 02:36:51 PM page

Method: HSL1 Sample Name: 9008L253-003
Run Time: 08/09/90 14:34:55 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-2.614	12.35	1.481	.1708	90.94	.3509	-2.685
SDev	2.272	1.68	.321	.2958	13.52	1.053	1.415
%RSD	-86.92	13.58	21.65	173.2	14.87	300.0	-52.71
#1	.0096	11.01	1.851	.0000	106.6	-.7018	-2.918
#2	-3.927	11.81	1.296	.5123	82.91	1.404	-1.167
#3	-3.926	14.23	1.296	.0000	83.36	.3509	-3.969

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.8240	2.977	22.37	37.75	-7.552	1.574	91.17
SDev	.9484	2.323	5.99	290.6	14.097	.937	21.81
%RSD	-115.1	78.01	26.76	769.7	-186.7	59.53	23.92
#1	-.2768	4.837	29.10	113.3	8.527	1.578	116.4
#2	-1.919	3.721	17.64	283.1	-13.40	2.510	78.58
#3	-.2759	.3739	20.37	-283.1	-17.78	.6354	78.58

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	-4.879	2.486	-6.175	50.54
SDev	9.389	12.01	.575	1.41
%RSD	-192.5	483.0	-9.312	2.796
#1	.5421	7.466	-5.601	51.66
#2	.5421	-11.21	-6.172	48.95
#3	-15.72	11.20	-6.751	50.99

AR302225

Analysis Report Thu 08-09-90 02:41:14 PM page

Method: HSL1 Sample Name: CCV Operator: ALM
Run Time: 08/09/90 14:39:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	480.6	5118.	5154.	260.2	25590.	239.3	2619.
SDev	7.2	24.	54.	2.2	241.	4.8	30.
%RSD	1.505	.4722	1.057	.8581	.9430	2.016	1.142
#1	472.3	5097.	5094.	257.7	25320.	235.1	2586.
#2	484.1	5113.	5167.	261.3	25700.	238.2	2625.
#3	485.4	5145.	5201.	261.8	25770.	244.6	2645.

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	513.2	1292.	5159.	26370.	25950.	759.5	26310.
SDev	1.8	17.	39.	279.	255.	4.5	310.
%RSD	.3482	1.342	.7540	1.059	.9810	.5862	1.179
#1	511.2	1273.	5115.	26560.	25660.	754.4	25980.
#2	514.0	1297.	5172.	26050.	26060.	761.0	26360.
#3	514.4	1306.	5189.	26500.	26130.	762.9	26590.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	2014.	3106.	2580.	1032.
SDev	36.	54.	20.	20.
%RSD	1.773	1.740	.7647	1.929
#1	1973.	3044.	2557.	1010.
#2	2033.	3133.	2590.	1039.
#3	2037.	3141.	2593.	1048.

AR302226

Analysis Report

Thu 08-09-90 02:44:09 PM page

Method: HSL1 Sample Name: CCB
Run Time: 08/09/90 14:42:13
Comment:
Operator: ALM
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.188	-16.92	1.296	.6831	11.82	.7018	.9339
SDev	2.002	3.63	.000	.5916	2.92	1.608	1.401
%RSD	91.53	-21.47	.0000	86.60	24.73	229.1	150.0
#1	3.936	-17.18	1.296	1.025	15.16	2.456	-.4669
#2	.0029	-13.16	1.296	.0000	10.61	.3509	2.335
#3	2.625	-20.41	1.296	1.025	9.701	-.7018	.9339

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.6857	2.232	9.095	-528.5	19.73	-.3081	54.70
SDev	.7117	.644	.315	409.6	25.93	.9379	52.11
%RSD	-103.8	28.86	3.464	-77.51	131.4	-304.4	95.25
#1	-1.097	2.604	9.459	-56.62	42.88	-.3079	107.2
#2	.1361	2.604	8.913	-736.1	24.61	.6297	53.84
#3	-1.097	1.488	8.913	-792.8	-8.283	-1.246	3.039

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	-2.981	22.41	-.7756	2.038
SDev	12.421	13.47	3.2844	.000
%RSD	-416.6	60.10	-423.4	.0031
#1	7.860	18.68	1.920	2.038
#2	-16.53	37.36	.1872	2.038
#3	-.2710	11.21	-4.434	2.038

Analysis Report

Thu 08-09-90 02:46:57 PM

Method: HSL1 Sample Name: 9008L253-005
Run Time: 08/09/90 14:45:01 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3788	15.57	64.59	.5123	12800.	2.105	2.685
SDev	2.7284	12.80	.56	.0000	72.	.608	1.526
%RSD	-720.2	82.16	.8596	.0000	.5617	28.87	56.86
#1	-2.586	7.787	64.59	.5123	12720.	2.456	3.385
#2	-1.223	30.34	65.15	.5123	12870.	2.456	.9339
#3	2.672	8.592	64.04	.5123	12800.	1.404	3.735

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5984	4.979	20040.	2529.	4458.	269.5	3159.
SDev	4.340	1.280	82.	461.	40.	.9	36.
%RSD	725.3	25.72	.4087	18.23	.9005	.3444	1.134
#1	-2.682	5.716	19970.	3058.	4412.	270.4	3123.
#2	5.520	3.500	20130.	2208.	4479.	269.5	3160.
#3	-1.043	5.720	20010.	2322.	4484.	268.6	3194.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	5.692	2.219	-20.11	58.77
SDev	10.46	4.298	2.33	1.02
%RSD	183.7	193.7	-11.58	1.744
#1	1.355	-.2585	-22.19	58.55
#2	-1.897	7.181	-20.55	59.88
#3	17.62	-.2670	-17.59	57.87

Analysis Report

Thu 08-09-90 02:49:50 PM page

Method: HSL1 Sample Name: 9008L253-005L
Run Time: 08/09/90 14:47:54 Operator: ALM
Comment: 5
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.449	-1.343	14.81	.5123	2827.	.3509	.7004
SDev	1.297	7.947	.32	.0000	22.	1.823	1.458
%RSD	89.52	-591.9	2.165	.0000	.7637	519.6	208.2
#1	.1536	-6.713	14.62	.5123	2851.	-.7018	-.4669
#2	1.446	-5.102	14.62	.5123	2820.	-.7018	2.335
#3	2.748	7.787	15.18	.5123	2810.	2.456	.2335

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2457	2.670	4391.	528.5	968.9	58.47	673.8
SDev	1.665	1.285	43.	656.3	11.0	.56	21.0
%RSD	677.5	48.12	.9779	124.2	1.132	.9611	3.111
#1	-1.539	1.931	4438.	-226.5	979.9	59.12	697.3
#2	.5206	1.926	4380.	962.6	957.9	58.15	667.3
#3	1.756	4.154	4354.	849.4	968.9	58.14	656.9

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	10.30	-14.58	-9.759	20.20
SDev	7.23	21.89	1.224	.01
%RSD	70.17	-150.2	-12.55	.0425
#1	12.74	-23.30	-11.13	20.19
#2	15.99	10.33	-8.790	20.20
#3	2.168	-30.76	-9.351	20.21

Analysis Report

Thu 08-09-90 02:53:00 PM

Method: HSL1 Sample Name: 9008L253-005R Operator: ALM
Run Time: 08/09/90 14:51:04
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co226
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.069	6.981	65.15	.0000	13090.	.7018	1.401
SDev	.771	6.594	.00	.0000	27.	1.608	.809
%RSD	72.12	94.45	.0000	.0000	.2067	229.1	57.74
#1	1.513	1.343	65.15	.0000	13120.	-.7018	.9339
#2	.1788	14.23	65.15	.0000	13070.	.3509	.9339
#3	1.515	5.370	65.15	.0000	13070.	2.456	2.335

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.087	2.789	20450.	2869.	4603.	275.7	3241.
SDev	1.091	2.320	43.	143.	17.	.6	1.
%RSD	-100.4	83.17	.2110	4.967	.3657	.2010	.0402
#1	-1.911	.1881	20470.	2718.	4598.	275.3	3241.
#2	.1509	4.643	20400.	2888.	4588.	275.3	3242.
#3	-1.500	3.536	20480.	3001.	4621.	276.3	3240.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	1.355	22.06	-15.74	16.99
SDev	3.544	13.47	.89	.01
%RSD	261.5	61.07	-5.627	.0508
#1	2.981	33.26	-16.71	16.98
#2	3.795	25.80	-15.52	17.00
#3	-2.710	7.111	-14.98	16.98

Analysis Report

Thu 08-09-90 02:57:10 PM page

Method: HSL1 Sample Name: 9008L253-005S
Run Time: 08/09/90 14:55:14 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	44.39	2181.	2176.	51.57	65340.	47.72	530.8
SDev	1.98	18.	18.	.59	424.	2.11	4.0
%RSD	4.451	.8062	.8111	1.147	.6496	4.412	.7609
#1	42.69	2200.	2196.	52.25	65830.	47.72	534.6
#2	46.56	2165.	2162.	51.23	65080.	49.82	531.1
#3	43.91	2177.	2170.	51.23	65110.	45.61	526.6

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	210.5	275.1	17990.	56120.	57600.	785.3	56940.
SDev	1.7	.6	148.	294.	389.	7.8	370.
%RSD	.8057	.2355	.8218	.5243	.6751	.9871	.6504
#1	212.4	275.5	18150.	56460.	58040.	793.8	57360.
#2	209.9	274.4	17940.	55950.	57430.	783.4	56690.
#3	209.1	275.5	17860.	55950.	57320.	778.6	56750.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	519.0	556.8	522.8	563.0
SDev	7.5	11.2	5.0	3.3
%RSD	1.447	2.017	.9511	.5908
#1	523.4	545.5	528.2	566.8
#2	510.4	568.0	518.5	560.7
#3	523.4	556.8	521.5	561.4

Analysis Report

Thu 08-09-90 03:00:39 PM

Method: HSL1 Sample Name: ISA
Run Time: 08/09/90 14:58:43
Comment: ICSAF
Mode: CONC Corr. Factor: 1

Operator: ALM

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	7.696	531600.	16.10	.5123	498700.	-3.860	7.237
SDev	1.490	192.	.32	.0000	966.	1.053	1.853
%RSD	19.36	.0360	1.991	.0000	.1937	-27.27	25.60
#1	5.988	531400.	16.29	.5123	498000.	-4.912	7.938
#2	8.734	531800.	16.29	.5123	498200.	-3.860	5.136
#3	8.365	531700.	15.73	.5123	499800.	-2.807	8.638

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.888	-11.21	192800.	-887.1	525200.	-73.04	85.53
SDev	.703	1.73	568.	605.5	335.	1.31	14.35
%RSD	-37.26	-15.46	.2948	-68.25	.0637	-1.798	16.77
#1	-1.078	-9.341	192900.	-1416.	525100.	-71.73	75.98
#2	-2.348	-11.54	193300.	-1019.	525600.	-74.36	78.58
#3	-2.236	-12.76	192200.	-226.5	525000.	-73.04	102.0

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	-11.11	74.75	62.04	-15.45
SDev	9.77	19.28	1.66	1.20
%RSD	-87.91	25.80	2.676	-7.794
#1	-20.60	69.75	61.19	-16.83
#2	-11.65	58.47	60.97	-14.87
#3	-1.084	96.05	63.95	-14.64

Analysis Report

Thu 08-09-90 03:04:10 PM page 1

Method: HSL1 Sample Name: ISB
Run Time: 08/09/90 15:02:14 Operator: ALM
Comment: ICSABF
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1084.	527200.	526.9	467.2	499200.	1011.	491.9
SDev	3.	2075.	3.2	1.8	1312.	9.	2.2
%RSD	.2793	.3936	.5992	.3953	.2629	.8897	.4446
#1	1088.	529500.	530.5	468.7	500700.	1019.	494.4
#2	1082.	526800.	526.0	467.7	498600.	1012.	490.2
#3	1083.	525400.	524.3	465.2	498200.	1001.	491.2

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	468.6	504.6	192600.	-1208.	525200.	399.2	26.48
SDev	3.0	.7	954.	559.	1675.	2.3	19.19
%RSD	.6447	.1367	.4952	-46.25	.3189	.5715	72.45
#1	471.3	505.0	193700.	-1472.	527200.	401.4	16.06
#2	469.0	503.8	192100.	-1586.	524400.	396.8	14.76
#3	465.3	504.9	192000.	-566.3	524100.	399.6	48.63

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	906.1	66.08	549.3	982.9
SDev	8.0	7.49	2.2	3.1
%RSD	.8854	11.34	.3987	.3156
#1	902.3	65.86	551.7	985.1
#2	915.3	58.70	547.5	979.3
#3	900.7	73.68	548.7	984.1

Analysis Report

Thu 08-09-90 03:07:04 PM

Method: HSL1 Sample Name: CRI
Run Time: 08/09/90 15:05:08 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18.46	360.9	213.2	11.27	1271.	10.53	107.7
SDev	1.32	65.2	2.1	.00	75.	1.61	1.5
%RSD	7.151	18.05	.9859	.0000	5.918	15.28	1.417
#1	19.77	434.7	211.7	11.27	1329.	10.88	108.8
#2	18.46	336.4	215.6	11.27	1297.	8.772	108.4
#3	17.13	311.5	212.3	11.27	1186.	11.93	106.0

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	24.89	64.74	314.7	924.9	1150.	32.36	935.2
SDev	1.19	.65	33.5	65.4	57.	.56	2.7
%RSD	4.770	1.000	10.64	7.070	4.973	1.725	.2899
#1	23.52	65.11	329.8	962.6	1188.	32.68	934.3
#2	25.58	65.11	338.0	849.4	1178.	32.68	938.2
#3	25.58	63.99	276.3	962.6	1084.	31.71	933.0

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	89.44	129.4	91.27	52.06
SDev	3.76	21.2	1.75	1.96
%RSD	4.199	16.41	1.916	3.765
#1	91.61	153.1	89.53	54.32
#2	85.11	123.2	91.26	50.92
#3	91.61	112.0	93.03	50.94

Analysis Report Thu 08-09-90 03:10:11 PM page 1

Method: HSL1 Sample Name: CCV Operator: ALM
Run Time: 08/09/90 15:08:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co2286
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	488.1	5232.	5238.	264.9	26200.	241.8	2651.
SDev	1.3	35.	38.	1.8	145.	7.0	14.
%RSD	.2706	.6659	.7311	.6700	.5525	2.899	.5372
#1	486.8	5216.	5229.	263.8	26120.	234.0	2638.
#2	489.4	5272.	5280.	266.9	26370.	243.5	2666.
#3	488.1	5208.	5205.	263.8	26110.	247.7	2650.

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na5889
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	521.0	1320.	5260.	27010.	26530.	770.5	26770.
SDev	3.4	9.	35.	247.	150.	3.4	207.
%RSD	.6449	.6834	.6652	.9138	.5662	.4411	.7736
#1	518.1	1312.	5241.	27290.	26470.	767.6	26770.
#2	524.7	1330.	5300.	26900.	26700.	774.2	26980.
#3	520.2	1318.	5239.	26840.	26420.	769.5	26570.

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	2060.	3129.	2621.	1054.
SDev	31.	13.	10.	8.
%RSD	1.499	.4136	.3961	.7432
#1	2037.	3122.	2622.	1047.
#2	2095.	3122.	2632.	1062.
#3	2049.	3144.	2611.	1053.

Analysis Report

Thu 08-09-90 03:13:52 PM

Method: HSL1 Sample Name: CCB
Run Time: 08/09/90 15:11:55 Operator: ALM
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	Ba4934	Be3130	Ca3179	Cd2288	Co228
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.321	2.685	.9254	.1708	26.53	.0000	-.1167
SDev	2.623	6.511	.8482	.5916	3.89	.6077	1.050
%RSD	198.6	242.5	91.65	346.4	14.65	3059e6	-900.0
#1	3.944	-4.296	1.851	.5123	30.16	-.7018	-1.16
#2	-1.302	3.759	.7403	-.5123	22.43	.3509	-.116
#3	1.320	8.592	.1851	.5123	26.98	.3509	.9339

Elem	Cr2677	Cu3247	Fe2599	K-7664	Mg2790	Mn2576	Na588
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2769	2.234	30.01	-773.9	47.51	.0150	33.00
SDev	.4113	.644	4.89	235.7	22.46	.5402	48.23
%RSD	-148.5	28.81	16.30	-30.46	47.28	3599.	146.2
#1	-.6883	1.491	35.65	-962.6	71.38	-.2948	86.40
#2	.1343	2.606	26.92	-849.4	44.34	.6387	19.97
#3	-.2767	2.606	27.47	-509.6	26.80	-.2989	-7.381

Elem	Ni2316	Sb2068	V-2924	Zn2138
Units	ppb	ppb	ppb	ppb
Avge	-7.860	-11.21	1.715	2.260
SDev	7.981	13.47	4.409	.393
%RSD	-101.5	-120.1	257.1	17.39
#1	1.355	3.729	6.525	2.032
#2	-12.47	-14.95	.7540	2.714
#3	-12.47	-22.42	-2.134	2.034

METALS BY FURNACE AA

updated 8/9 aw 075

WESTON

AA FURNACE METALS ANALYSIS

BOOK = 838
PAGE = 05

LIMS FILE AS08081
START DATE/ANALYST 8/8/90 aw for mw
CAL STD MFR/PREP DATE 8/8/90 mw
ICV/CCV MFR/PREP DATE 6/21/90 Liniv. Vent.

WAVELENGTH 193.7 nm
CORR COEF .99940
INSTRUMENT AA 4.1

CLIENT ID	RFW BATCH /SAMPLE #	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	BLK (AZ)		0.0				
	STD 1 (10ppb)		10.0				
	STD 2 (15ppb)		14.3				
1/K	STD 3 (25ppb)	NA	25.9				
aw	STD 4 (50ppb)	aw	48.4				
	ICV		29.9				
	ICB		-0.5				
	+20		20.5				
	CRA		10.3				
	+20		29.8				
	90L876-MB1		-0.6				
	+20		19.0		95		
	LC1		28.7		96		
	+20		47.8		96		
	LC2		27.5		92		
	+20		46.9		97		
	9008L253-001		1.4				
	+20		19.0		95		
	CCV		29.9		100		
	CCB		-0.7				
	+20		19.5				
	9008L253-001R		0.6				
	+20		18.7		93		
				8/8/90 aw			cont'd →

END DATE/ANALYST: 8/8/90 Ulmit S. Rine

AR302238

SUPERVISOR REVIEW/DATE: mp 8/12/90

WESTON

AA FURNACE METALS ANALYSIS

updated

BOOK = 1858 D78
PAGE = 06

LIMS FILE AS08081 cont'd
START DATE/ANALYST 8/8/90 AW for MW
CAL STD MFR/PREP DATE
ICV/CCV MFR/PREP DATE

WAVELENGTH ______ nm
CORR COEF
INSTRUMENT AA 4.1

CLIENT ID	RFW BATCH /SAMPLE #	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	9008L253-001S		37.3				
	+20		55.6		91		Not Necessary
	003		-0.4				
N/A	+20	N/A	18.3		91		
AW	005	AW	-0.4				
	+20		19.2		96		
	005R		0.0				
	+20		18.7		93		
	CCV		29.1		97		
	CCB		-0.2				
	+20		18.1		90		
	9008L253-005S		39.4				
	+20		58.1				Not Necessary
	9008L257-001		4.5				
	+20		20.1		78	W	
	002		0.3				
	+20		19.0		95		
	003		70.7				over calibration —
	+20		92.0				see Dilution
	004		-0.3				
	+20		18.7		93		
	CCV		30.0		100		
	CCB		-0.5				
	+20		18.8		94		cont'd →

END DATE/ANALYST: 8/8/90 AW

SUPERVISOR REVIEW/DATE: MW 8/12/90

AR302239

WFW 21-21-016/G-03/90

updated - 077

BOOK = 1838
PAGE = 07

WESTON

AA FURNACE METALS ANALYSIS

LIMS FILE ASU80801 (cont'd)
START DATE/ANALYST 8/8/90 [illegible]
CAL STD MFR/PREP DATE
ICV/CCV MFR/PREP DATE

WAVELENGTH ______ nm
CORR COEF ______
INSTRUMENT AA4.1

CLIENT ID	RFW BATCH /SAMPLE #	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	9008L257-005		0.4				
	+20		15.7		78	W	
	006		0.0				
	+20	N/A	18.6		93		
	007		0.1				
N/A			19.0		95		
	+20						
	009		2.2				
	+20		17.6		76	W	
	BLK		0.0				
	+20		17.0				
	CCV		29.1		97		
	CCB		-0.3				
	+20		18.7		93		
	9008L257-003		16.7	4			
	+20		30.4	4	98		
	CCV		29.9		100		
	CCB		0.1				
	+20		18.1		90		

8/8/90

END DATE/ANALYST: 8/8/90 [illegible]

SUPERVISOR REVIEW/DATE: [illegible] 8/12/90

AR302240

lement File: AS080801.SEL — Element: As
e: 08/08/90 — Time: 08:53
a Storage File: AS080801.DAT — ID/Weight File: AS080801.A60
echnique: HGA — Calibration Type: Linear

O: Blank — Seq. No.: 00001 — A/S Pos.: 40 — Date: 08/08/90
Replicate 1 — Time: 08:53
Blank Corrected Pk Area (A-s): 0.001

O: Blank — Seq. No.: 00003 — A/S Pos.: 40 — Date: 08/08/90
Replicate 1 — Time: 09:08
Blank Corrected Pk Area (A-s): -0.002

2640 Cals

ID: Blank — Seq. No.: 00004 — A/S Pos.: 40 — Date: 08/08/90
Replicate 1 — Time: 09:14
Blank Corrected Pk Area (A-s): 0.002

Replicate 2 — Time: 09:17
Blank Corrected Pk Area (A-s): 0.005

Mean Pk Area (A-s): 0.004 — SD: 0.0023 — RSD(%): 65.1

Auto-zero performed.

ID: Standard 1 — Seq. No.: 00005 — A/S Pos.: 35 — Date: 08/08/90
Replicate 1 — Time: 09:19
Blank Corrected Pk Area (A-s): 0.069

Replicate 2 — Time: 09:22
Blank Corrected Pk Area (A-s): 0.066

Mean Pk Area (A-s): 0.068 — SD: 0.0025 — RSD(%): 3.72

Standard number 1 applied. [10.0]
Correlation coefficient: 1.00000 — Slope: 0.0068

ID: Standard 2 — Seq. No.: 00006 — A/S Pos.: 35 — Date: 08/08/90
Replicate 1 — Time: 09:24
Concentration (ug/L): 13.9

Replicate 2 — Time: 09:27
Concentration (ug/L): 14.8

Mean Conc (ug/L): 14.3 — SD: 0.62 — RSD(%): 4.31

Standard number 2 applied. [15.0]
Correlation coefficient: 0.99391 — Slope: 0.0065

Weston Analytics

Case No.(s)
SDG No.(s) — Date: 08/08/90
Instrument AA 1
Background BZ
Integration Time 6 Sec
Injection Vol. 20ul — Date: 08/09/90
Cal STD Source YWR
Analyst Alv for mer

AR302241

ID: Standard 3 Seq. No.: 00007 A/S Pos.: 34 Date: 08/08/90

Replicate 1 Time: 09:29
Concentration (ug/L): 25.4

Replicate 2 Time: 09:32
Concentration (ug/L): 26.4

Mean Conc (ug/L): 25.9 SD: 0.74 RSD(%): 2.84

Standard number 3 applied. [25.0]
Correlation coefficient: 0.99828 Slope: 0.0067

ID: Standard 4 Seq. No.: 00008 A/S Pos.: 34 Date: 08/08/90

Replicate 1 Time: 09:34
Concentration (ug/L): 48.7

Replicate 2 Time: 09:37
Concentration (ug/L): 48.1

Mean Conc (ug/L): 48.4 SD: 0.39 RSD(%): 0.81

Standard number 4 applied. [50.0]
Correlation coefficient: 0.99940 Slope: 0.0065

ID: ICV Seq. No.: 00009 A/S Pos.: 36 Date: 08/08/90

Replicate 1 Time: 09:39
Concentration (ug/L): 30.1

Replicate 2 Time: 09:42
Concentration (ug/L): 29.7

Mean Conc (ug/L): 29.9 SD: 0.31 RSD(%): 1.03

Check sample is within range 26.9 - 33.1

ID: ICB Seq. No.: 00010 A/S Pos.: 1 Date: 08/08/90

Replicate 1 Time: 09:44
Concentration (ug/L): -0.8

Replicate 2 Time: 09:47
Concentration (ug/L): -0.2

Mean Conc (ug/L): -0.5 SD: 0.38 RSD(%): 73.50

ID: ICB Seq. No.: 00011 A/S Pos.: 1 Date: 08/08/90

Replicate 1 Time: 09:50
Concentration (ug/L): 19.9

Replicate 2 Time: 09:5[illegible]
Concentration (ug/L): 21.0

Mean Conc (ug/L): 20.5 SD: 0.78 RSD(%): 3.9:

Recovery is 104.9%

ID: CRA Seq. No.: 00012 A/S Pos.: 2 Date: 08/08/90

Replicate 1 Time: 09:55
Concentration (ug/L): 9.4

Replicate 2 Time: 09:57
Concentration (ug/L): 11.2

Mean Conc (ug/L): 10.3 SD: 1.27 RSD(%): 12.3[illegible]

ID: CRA Seq. No.: 00013 A/S Pos.: 2 Date: 08/08/90

Replicate 1 Time: 10:00
Concentration (ug/L): 29.8

Replicate 2 Time: 10:02
Concentration (ug/L): 29.8

Mean Conc (ug/L): 29.8 SD: 0.01 RSD(%): 0.04

Recovery is 97.6%

ID: 90L0876-MB1 Seq. No.: 00014 A/S Pos.: 3 Date: 08/08/90

Replicate 1 Time: 10:05
Concentration (ug/L): -1.1

Replicate 2 Time: 10:08
Concentration (ug/L): -0.0

Mean Conc (ug/L): -0.6 SD: 0.79 RSD(%): 14[illegible].02

ID: 90L0876-MB1 Seq. No.: 00015 A/S Pos.: 3 Date: 08/08/90

Replicate 1 Time: 10:10
Concentration (ug/L): 19.1

Replicate 2 Time: 10:13
Concentration (ug/L): 19.0

Mean Conc (ug/L): 19.0 SD: 0.06 RSD(%): 0.31

Recovery is 98.0%

ID: 90L0876-LC1 Seq. No.: 00016 A/S Pos.: 4 Date: 08/08/90

AR302243

Replicate 1 Time: 10:15

Concentration (ug/L): 28.1

Replicate 2 Time: 10:18
Concentration (ug/L): 29.2

Mean Conc (ug/L): 28.7 SD: 0.81 RSD(%): 2.84

ID: 90L0876-LC1 Seq. No.: 00017 A/S Pos.: 4 Date: 08/08/90

Replicate 1 Time: 10:20
Concentration (ug/L): 48.6

Replicate 2 Time: 10:23
Concentration (ug/L): 47.0

Mean Conc (ug/L): 47.8 SD: 1.12 RSD(%): 2.35

Recovery is 95.8%

ID: 90L0876-LC2 Seq. No.: 00018 A/S Pos.: 5 Date: 08/08/90

Replicate 1 Time: 10:26
Concentration (ug/L): 27.6

Replicate 2 Time: 10:28
Concentration (ug/L): 27.3

Mean Conc (ug/L): 27.5 SD: 0.20 RSD(%): 1.72

ID: 90L0876-LC2 Seq. No.: 00019 A/S Pos.: 5 Date: 08/08/90

Replicate 1 Time: 10:31
Concentration (ug/L): 46.5

Replicate 2 Time: 10:34
Concentration (ug/L): 47.3

Mean Conc (ug/L): 46.9 SD: 0.53 RSD(%): 1.12

Recovery is 97.1%

ID: 9008L253-001 Seq. No.: 00020 A/S Pos.: 6 Date: 08/08/90

Replicate 1 Time: 10:36
Concentration (ug/L): 1.7

Replicate 2 Time: 10:39
Concentration (ug/L): 1.1

Mean Conc (ug/L): 1.4 SD: 0.44 RSD(%): 31.31

ID: 9008L253-001 Seq. No.: 00021 A/S Pos.: 6 Date: 08/08/90

Replicate 1 Time: 10:41

ncentration (ug/L): 19.5

licate 2 Time: 10:4
ncentration (ug/L): 18.5

Mean Conc (ug/L): 19.0 SD: 0.57 RSD(%): 2.54

Recovery is 98.1%

: ICV Seq. No.: 00022 A/S Pos.: 36 Date: 08/08/90

Replicate 1 Time: 10:47
ncentration (ug/L): 30.4

Replicate 2 Time: 10:49
ncentration (ug/L): 29.4

Mean Conc (ug/L): 29.9 SD: 0.74 RSD(%): 2.49

eck samole is Within range 26.9 - 33.1

): CCB Seq. No.: 00023 A/S Pos.: 7 Date: 08/08/90

Replicate 1 Time: 10:52
ncentration (ug/L): -1.0

Replicate 2 Time: 10:55
oncentration (ug/L): -0.3

Mean Conc (ug/L): -0.7 SD: 0.50 RSD(%): 73.96

D: CCB Seq. No.: 00024 A/S Pos.: 7 Date: 08/08/90

eplicate 1 Time: 10:57
oncentration (ug/L): 19.3

eplicate 2 Time: 11:00
oncentration (ug/L): 19.6

Mean Conc (ug/L): 19.5 SD: 0.22 RSD(%): 1.12

Recovery is 100.6%

D: 9008L253-001R Seq. No.: 00025 A/S Pos.: 8 Date: 08/08/90

Replicate 1 Time: 11:03
oncentration (ug/L): 1.6

licate 2 Time: 11:05
entration (ug/L): -0.4

Mean Conc (ug/L): 0.6 SD: 1.41 RSD(%): 230.60

AR302245

ID: 9008L253-001R Seq. No.: 00026 A/S Pos.: 8 Date: 08/08/90

Replicate 1 Time: 11:08
Concentration (ug/L): 19.5

Replicate 2 Time: 11:1
Concentration (ug/L): 18.6

Mean Conc (ug/L): 18.7 SD: 0.15 RSD(%): 1.

Recovery is 90.5%

ID: 9008L253-001S Seq. No.: 00027 A/S Pos.: 9 Date: 08/08/90

Replicate 1 Time: 11:13
Concentration (ug/L): 36.8

Replicate 2 Time: 11:16
Concentration (ug/L): 37.8

Mean Conc (ug/L): 37.3 SD: 0.76 RSD(%): 2.07

ID: 9008L253-001S Seq. No.: 00028 A/S Pos.: 9 Date: 08/08/90

Replicate 1 Time: 11:18
Concentration (ug/L): 54.1

Sample abs. is greater than that of the largest standard.
Replicate 2 Time: 11:21
Concentration (ug/L): 57.0

Sample abs. is greater than that of the largest standard.
Mean Conc (ug/L): 55.6 SD: 2.03 RSD(%): 3.66

Recovery is 91.3%

ID: 9008L253-002 Seq. No.: 00029 A/S Pos.: 10 Date: 08/08/90

Replicate 1 Time: 11:24
Concentration (ug/L): -0.0

Replicate 2 Time: 11:26
Concentration (ug/L): -0.7

Mean Conc (ug/L): -0.4 SD: 0.44 RSD(%): 122.34

ID: 9008L253-003 Seq. No.: 00030 A/S Pos.: 10 Date: 08/08/90

Replicate 1 Time: 11:29
Concentration (ug/L): 18.9

Replicate 2 T 11:32
Concentration (ug/L): 17.8

Mean Conc (ug/L): 18.3 SD: 0.73 RSD(%): 3.96

ecovery is 93.5%

9008L253-005 Seq. No.: 00031 A/S Pos.: 11 Date: 08/08/90

Replicate 1 Time: 11:34
oncentration (ug/L): 0.5

Replicate 2 Time: 11:37
Concentration (ug/L): -1.3

ean Conc (ug/L): -0.4 SD: 1.30 RSD(%): [illegible]

): 9008L253-005 Seq. No.: 00032 A/S Pos.: 11 Date: [illegible]

Replicate 1 Time: 11:39
oncentration (ug/L): 18.8

Replicate 2 Time: 11:42
oncentration (ug/L): 19.5

Mean Conc (ug/L): 19.2 SD: 0.53 RSD(%): 2.78

ecovery is 97.8%

9008L253-005R Seq. No.: 00033 A/S Pos.: 12 Date: 08/08/90

Replicate 1 Time: 11:45
oncentration (ug/L): 1.0

Replicate 2 Time: 11:47
Concentration (ug/L): -1.0

Mean Conc (ug/L): 0.0 SD: 1.47 RSD(%): 13336.36

): 9008L253-005R Seq. No.: 00034 A/S Pos.: 12 Date: 08/08/90

eplicate 1 Time: 11:50
oncentration (ug/L): 18.9

Replicate 2 Time: 11:52
oncentration (ug/L): 18.5

Mean Conc (ug/L): 18.7 SD: 0.32 RSD(%): 1.72

ecovery is 93.3%

): ICV Seq. No.: 00035 A/S Pos.: 34 Date: 08/08/90

[illegible]cate 1 Time: 11:55
[illegible]entration (ug/L): 28.8

Replicate 2 Time: 11:58
oncentration (ug/L): 29.4

Mean Conc (ug/L): 29.1 SD: 0.44 RSD(%): 1.50

Check sample is within range 26.9 - 33.1

ID: CCB Seq. No.: 00036 A/S Pos.: 13 Date: 08/08/90

Replicate 1 Time: 12:00
Concentration (ug/L): 0.2

Replicate 2 Time: 12:03
Concentration (ug/L): -0.6

Mean Conc (ug/L): -0.2 SD: 0.54 RSD(%): [illegible]

ID: CCB Seq. No.: 00037 A/S Pos.: 13 Date: 08/08/90

Replicate 1 Time: 12:05
Concentration (ug/L): 18.3

Replicate 2 Time: 12:08
Concentration (ug/L): 17.8

Mean Conc (ug/L): 18.1 SD: 0.33 RSD(%): 1.83

Recovery is 91.3%

ID: 9008L253-005S Seq. No.: 00038 A/S Pos.: 14 Date: 08/08/90

Replicate 1 Time: 12:10
Concentration (ug/L): 39.0

Replicate 2 Time: 12:13
Concentration (ug/L): 39.9

Mean Conc (ug/L): 39.4 SD: 0.65 RSD(%): 1.64

ID: 9008L253-005S Seq. No.: 00039 A/S Pos.: 14 Date: 08/08/90

Sample abs. is greater than that of the largest standard.
Replicate 1 Time: 12:15
Concentration (ug/L): 58.1

Sample abs. is greater than that of the largest standard.
Replicate 2 Time: 12:18
Concentration (ug/L): 58.2

Sample abs. is greater than that of the largest standard.
Mean Conc (ug/L): 58.1 SD: 0.08 RSD(%): 0.14

Recovery is 93.4%

ID: 9008L257-001 Seq. No.: 00040 A/S Pos.: 15 Date: 08/08/90

Replicate 1 Time: 12:21

Concentration (ug/L): 4.9

Replicate 2
Concentration (ug/L): 4.1 Time: 12:23

Mean Conc (ug/L): 4.5 SD: 0.54 RSD(%): 11.95

ID: 9008L257-002 Seq. No.: 00041 A/S Pos.: 15 Date: 08/08/90

Replicate 1
Concentration (ug/L): 19.9 Time: 12:26

Replicate 2
Concentration (ug/L): 20.8 Time: 12:29

Mean Conc (ug/L): 20.1 SD: 0.93 RSD(%): 4.63

Recovery is 78.2%

ID: 9008L257-002 Seq. No.: 00042 A/S Pos.: 16 Date: 08/08/90

Replicate 1
Concentration (ug/L): 0.4 Time: 12:31

Replicate 2
Concentration (ug/L): 0.1 Time: 12:33

Mean Conc (ug/L): 0.3 SD: 0.20 RSD(%): 77.94

ID: 9008L257-002 Seq. No.: 00043 A/S Pos.: 16 Date: 08/08/90

Replicate 1
Concentration (ug/L): 18.9 Time: 12:36

Replicate 2
Concentration (ug/L): 19.1 Time: 12:38

Mean Conc (ug/L): 19.0 SD: 0.18 RSD(%): 0.95

Recovery is 93.6%

ID: 9008L257-003 Seq. No.: 00044 A/S Pos.: 17 Date: 08/08/90

Sample abs. is greater than that of the largest standard.
Replicate 1
Concentration (ug/L): 70.0 Time: 12:41

Sample abs. is greater than that of the largest standard.
Replicate 2
Concentration (ug/L): 71.4 Time: 12:44

Sample abs. is greater than that of the largest standard.
Mean Conc (ug/L): 70.7 SD: 1.00 RSD(%): 1.41

ID: 9008L257-003 Seq. No.: 00045 A/S Pos.: 17 Date: 08/08/[illegible]

Sample abs. is greater than that of the largest standard.
Replicate 1 Time: 12:46
Concentration (ug/L): 91.8

Sample abs. is greater than that of the largest standard.
Replicate 2 Time: 12:48
Concentration (ug/L): 92.2

Sample abs. is greater than that of the largest standard.
Mean Conc (ug/L): 92.0 SD: 0.30 RSD(%): [illegible]

Recovery is 106.6%

ID: 9008L257-004 Seq. No.: 00046 A/S Pos.: 18 Date: 08/08/[illegible]

Replicate 1 Time: 12:51
Concentration (ug/L): -0.7

Replicate 2 Time: 12:53
Concentration (ug/L): 0.1

Mean Conc (ug/L): -0.3 SD: 0.53 RSD(%): 173.56

ID: 9008L257-004 Seq. No.: 00047 A/S Pos.: 18 Date: 08/08/[illegible]

Replicate 1 Time: 12:56
Concentration (ug/L): 19.3

Replicate 2 Time: 12:58
Concentration (ug/L): 18.2

Mean Conc (ug/L): 18.7 SD: 0.77 RSD(%): 4.10

Recovery is 95.2%

ID: ICV Seq. No.: 00048 A/S Pos.: 36 Date: 08/08/[illegible]

Replicate 1 Time: 13:01
Concentration (ug/L): 30.4

Replicate 2 Time: 13:03
Concentration (ug/L): 29.6

Mean Conc (ug/L): 30.0 SD: 0.61 RSD(%): 2.03

Check sample is within range 26.9 - 33.1

ID: CCB Seq. No.: 00049 A/S Pos.: 19 Date: 08/08/[illegible]

Replicate 1 Time: 13:06
Concentration (ug/L): -0.6

Replicate 2 Time: 13:08

oncentration (ug/L): -0.4

an Conc (ug/L): -0.5 SD: 0.18 RSD(% : [illegible]

~~~~~~

D: CCS Seq. No.: 00050 A/S Pos.: 19 Date: 08/08/90

eplicate 1 Time: 13:11
oncentration (ug/L): 17.9

Replicate 2 Time: 13:11
oncentration (ug/L): 19.6

Mean Conc (ug/L): 18.8 SD: 1.20 RSD(%): [illegible]

ecovery is 96.4%

~~~~~~

D: 9008L257-005 Seq. No.: 00051 A/S Pos.: 20 Date: 08/08/90

Replicate 1 Time: 13:16
oncentration (ug/L): 0.2

Replicate 2 Time: 13:18
oncentration (ug/L): 0.6

Mean Conc (ug/L): 0.4 SD: 0.31 RSD(%): 83.32

~~~~~~

9008L257-005 Seq. No.: 00052 A/S Pos.: 20 Date: 08/08/90

plicate 1 Time: 13:21
Concentration (ug/L): 16.3

plicate 2 Time: 13:23
ncentration (ug/L): 15.1

an Conc (ug/L): 15.7 SD: 0.84 RSD(%): 5.34

Recovery is 76.9%

~~~~~~

D: 9008L257-006 Seq. No.: 00053 A/S Pos.: 21 Date: 08/08/90

plicate 1 Time: 13:26
ncentration (ug/L): -1.2

plicate 2 Time: 13:28
ncentration (ug/L): 1.2

ean Conc (ug/L): -0.0 SD: 1.69 RSD(%): 4064.78

~~~~~~

D 9008L257-006 Seq. No.: 00054 A/S Pos.: 21 Date: 08/08/90

licate 1 Time: 13:31
oncentration (ug/L): 17.9

plicate 2 Time: 13:33
~~~~~~

Concentration (ug/L): 19.2

Mean Conc (ug/L): 18.6 SD: 0.90 RSD(%): 4.8

Recovery is 93.0%

ID: 9008L257-007 Seq. No.: 00055 A/S Pos.: 22 Date: 08/08/90

Replicate 1 Time: 13:36
Concentration (ug/L): 0.5

Replicate 2 Time: 13:39
Concentration (ug/L): -0.2

Mean Conc (ug/L): 0.1 SD: 0.49 RSD(%): 333.50

ID: 9008L257-007 Seq. No.: 00056 A/S Pos.: 22 Date: 08/08/90

Replicate 1 Time: 13:41
Concentration (ug/L): 18.8

Replicate 2 Time: 13:44
Concentration (ug/L): 19.2

Mean Conc (ug/L): 19.0 SD: 0.28 RSD(%): 1.49

Recovery is 94.2%

ID: 9008L257-009 Seq. No.: 00057 A/S Pos.: 23 Date: 08/08/90

Replicate 1 Time: 13:46
Concentration (ug/L): 2.1

Replicate 2 Time: 13:49
Concentration (ug/L): 2.3

Mean Conc (ug/L): 2.2 SD: 0.16 RSD(%): 7.09

ID: 9008L257-009 Seq. No.: 00058 A/S Pos.: 23 Date: 08/08/90

Replicate 1 Time: 13:52
Concentration (ug/L): 17.2

Replicate 2 Time: 13:54
Concentration (ug/L): 17.9

Mean Conc (ug/L): 17.6 SD: 0.47 RSD(%): 2.69

Recovery is 76.6%

Seq. No.: 00059 A/S Pos.: 24 Date: 08/08/90

Replicate 1 Time: 13:57
Concentration (ug/L): 0.3

Replicate 2 Time: 13:59
Concentration (ug/L): -0.7

ean Conc (ug/L): 0.0 SD: 0. RSD(%): 534.52

ID: Seq. No.: 00060 A/S Pos.: 24 Date:

eplicate 1 Time: 14:02
Concentration (ug/L): 16.7

eplicate 2 Time: 14:05
Concentration (ug/L): 17.2

ean Conc (ug/L): 17.0 SD: 0.40 RSD(%):

Recovery is 84.8%

ID: ICV Seq. No.: 00061 A/S Pos.: 36 Date: 08/08/90

eplicate 1 Time: 14:07
Concentration (ug/L): 29.1

eplicate 2 Time: 14:10
Concentration (ug/L): 29.0

an Conc (ug/L): 29.1 SD: 0.03 RSD(%): 0.12

[redacted] sample is within range (26.9 - 33.1)

ID: CCB Seq. No.: 00062 A/S Pos.: 25 Date: 08/08/90

plicate 1 Time: 14:12
ncentration (ug/L): 0.2

plicate 2 Time: 14:15
ncentration (ug/L): -0.8

ean Conc (ug/L): -0.3 SD: 0.67 RSD(%): 215.66

D: CCB Seq. No.: 00063 A/S Pos.: 25 Date: 08/08/90

licate 1 Time: 14:18
ncentration (ug/L): 18.9

licate 2 Time: 14:20
ncentration (ug/L): 18.6

n Conc (ug/L): 18.7 SD: 0.26 RSD(%): 1.38

ery is 95.2%

: 9008257-003 14 Seq. No.: 00064 A/S Pos.: 24 Date: 08/08/90

The background signal is changing during BOC measurement.
Replicate 1 Time: 15:37
Concentration (ug/L): 15.5

Replicate 2 Time: 15:40
Concentration (ug/L): 17.9

Mean Conc (ug/L): 16.7 SD: 1.67 RSD(%): 9.99

ID: 03 20 Seq. No.: 00065 A/S Pos.: 24 Date: 08/08/90

Replicate 1 Time: 16:42
Concentration (ug/L): 36.6

Replicate 2 Time: 16:45
Concentration (ug/L): 36.3

Mean Conc (ug/L): 36.4 SD: 0.23 RSD(%): 0.64

Recovery is 93.6%

ID: ICV Seq. No.: 00066 A/S Pos.: 36 Date: 08/08/90

Replicate 1 Time: 16:47
Concentration (ug/L): 29.2

Replicate 2 Time: 16:50
Concentration (ug/L): 30.7

Mean Conc (ug/L): 29.9 SD: 1.07 RSD(%): 3.58

Check sample is within range 26.9 - 33.1

ID: CCB Seq. No.: 00067 A/S Pos.: 25 Date: 08/08/90

Replicate 1 Time: 16:53
Concentration (ug/L): 0.1

Replicate 2 Time: 16:55
Concentration (ug/L): -0.4

Mean Conc (ug/L): -0.1 SD: 0.35 RSD(%): 265.68

ID: CCB Seq. No.: 00068 A/S Pos.: 25 Date: 08/08/90

Replicate 1 Time: 16:58
Concentration (ug/L): 18.0

Replicate 2 Time: 17:01
Concentration (ug/L): 18.2

Mean Conc (ug/L): 18.1 SD: 0.13 RSD(%): 0.74

Recovery is 91.1%

WESTON

A.A. FURNACE METALS ANALYSIS

BOOK = 1803
PAGE = 7

LIMS FILE Pb080801
START DATE/ANALYST 8/8/90 E SINCLAIR
CAL STD MFR/PREP DATE 8/8/90 Baker
ICV/CCV MFR/PREP DATE 10/23/90 IV

WAVELENGTH 283.3 nm
CORR COEF 0.9999
INSTRUMENT AA3.1

CLIENT ID	RFW BATCH /SAMPLE =	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	Blank CRA	8.026 ~~0.059~~	-0.2 3.0				Beg Time 19:17
	STD2	0.087	10.3				
	STD3	0.210	25.0				
	STD4	0.419	50.0				
	ICV	0.258	30.7		102		
	ICB	0.002	0.1				
	CRA	0.025	2.8				
	90L0876-MB1	0.005	0.4				
	+20	0.173	20.5		103		
	LCI	0.265	31.5				
	+20	0.421	50.2		94		
	LCZ	0.251	29.9				
	+20	0.412	49.1		96		
	9008L253-001E	0.092	10.9				
	+20	0.226	26.9		80	MSA	
	Blank	0.001	-0.03				
	CCV	0.261	31.1		104		
	CCB	0.001	-0.03				
	001E	0.094	11.1			MSA	
	+20	0.232	27.6		82		
	001S	0.198	23.5				
	003	0.002	0.1				
	+20	0.188	22.3		112		
	005	0.015	1.6				

DATE/ANALYST:

SUPERVISOR REVIEW/DATE:

AR302255

WESTON

AA FURNACE METALS ANALYSIS

BOOK = 1803
PAGE = ~~75~~ 093

LIMS FILE Pb080801 cont'd
START DATE/ANALYST
CAL STD MFR/PREP DATE
ICV/CCV MFR/PREP DATE

WAVELENGTH nm
CORR COEF
INSTRUMENT AA3.1

CLIENT ID	RFW BATCH /SAMPLE =	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	+2D	0.149	17.7		88		
	9008L253-005R	0.002	0.1			W	
	+2O	0.138	16.4		82		
	Blank	0	-0.2				
	CCV	0.268	31.9		100		
	CCB	0	-0.2				
	005S	0.131	15.5				
	9008L257-001	0.028	3.2			MSA	
	+2O	0.144	17.1		69		
	002	0.004	0.3			W	
	+2O	0.202	24.0		120		
	003	0.483					see dilution
	+2O	0.302					
	004	0.003	0.3			W	
	+2O	0.204	24.3		121		
	Blank	0	-0.2				
	CCV	OUT					CCV out see run
	CCB						
							ENDTIME 00:15

ND DATE/ANALYST:
8/8/90 E. Sinclair

SUPERVISOR REVIEW/DATE:

AR302256

21-21-016/G-03/90

Atomic Spectroscopy Information Management Software - Data Collection Mode

Data File Name: PB080801
Method File Name: PB080801
Date: 90/08/08 Time: 09:17
Technique: Furnace

Begin Element: Lead 1

Blank
-0.094 -0.099
Mean: -0.096 abs SD: 0.0035

Auto-Zero Performed

RA
0.064 0.054
Mean: 0.059 abs SD: 0.0071

TD1
0.180 0.178
Mean: 0.179 abs SD: 0.0014

Start Element: Lead 1

Blank
0.001 0.002
Mean: 0.002 abs SD: 0.0007

Auto-Zero Performed

RA
0.026 0.026
Mean: 0.026 abs SD: 0.0000

[illegible]1
[illegible]084 0.090
Mean: 0.087 abs SD: 0.0042

STD2
0.207 0.213
Mean: 0.210 abs SD: 0.0042

STD3
0.412 0.425
Mean: 0.419 abs SD: 0.0092

ICV
0.259 0.257
Mean: 0.258 abs SD: 0.0014 CV = 0.5

ICB
0.003 0.001
Mean: 0.002 abs SD: 0.0014 CV = 70

CRA
0.023 0.026
Mean: 0.025 abs SD: 0.0021 CO = 8.4

JLO876-MB1
[illegible]7 0.002
[illegible]an: 0.005 abs SD: 0.0035 CO = 70

B1 + 20
0.172 0.174

Weston Analytics

Case No. (s) _____
SDG Act (s) _____
Instrument AA3.1
Background B2
Integration Time 5sec
Injection Vol. 20ul
Calib. STD Source Baker
Analyst EJS

AR302257

Mean: 0.173 abs SD: 0.0014 CV = 0.8

90L0876-LC1
0.264 0.267
Mean: 0.265 abs SD: 0.0021 CV = 0.8

LC1 + 20
0.420 0.423
Mean: 0.421 abs SD: 0.0021 CV = 0.5

90L0876-LC2
0.254 0.248
Mean: 0.251 abs SD: 0.0042 CV = 1.7

LC2 + 20
0.409 0.416
Mean: 0.412 abs SD: 0.0050 CV = 1.2

9008L253-001
0.092 0.092
Mean: 0.092 abs SD: 0.0000 CV = 0

001 + 20
0.226 0.227
Mean: 0.226 abs SD: 0.0007 CV = 0.3

Sample 16
0.001 0.001
Mean: 0.001 abs SD: 0.0000 CV = 0

CCV
0.261 0.260
Mean: 0.261 abs SD: 0.0007 CV = 0.3

CCB
0.002 0.001
Mean: 0.001 abs SD: 0.0007 CV = 70

9008L253-001R
0.094 0.094
Mean: 0.094 abs SD: 0.0000 CV = 0

001R + 20
0.232 0.232
Mean: 0.232 abs SD: 0.0000 CV = 0

9008L253-001
0.198 0.199
Mean: 0.198 abs SD: 0.0007 CV = 0.4

9008L253-003
0.003 0.002
Mean: 0.002 abs SD: 0.0007 CV = 35

003 + 20
0.189 0.188
Mean: 0.188 abs SD: 0.0007 CV = 0.4

9008L253-005
0.014 0.015

Mean: 0.015 abs SD: 0.0007 CO=4.7

05 + 20
0.150 0.147
Mean: 0.149 abs SD: 0.0021 CO=1.4

008L253-005R
0.003 0.002
Mean: 0.002 abs SD: 0.0007 CO=35

05R + 20
0.137 0.138
Mean: 0.138 abs SD: 0.0007 CO=0.5

Sample 28
0.001 -0.001
Mean: -0.000 abs SD: 0.0014 CO=0

CCV
0.270 0.265
Mean: 0.268 abs SD: 0.0035 CO=1.3

CCB
0.000 -0.001
Mean: -0.000 abs SD: 0.0007 CO=0

008L253-005S
0.129 0.132
Mean: 0.131 abs SD: 0.0021

008L257-001
0.027 0.028
Mean: 0.028 abs SD: 0.0007

01 + 20
0.145 0.142
Mean: 0.144 abs SD: 0.0021

9008L257-002
0.004 0.003
Mean: 0.004 abs SD: 0.0007

02 + 20
0.204 0.200
Mean: 0.202 abs SD: 0.0028

008L257-003
0.503 0.463
Mean: 0.483 abs SD: 0.0283

03 + 20
0.605 -0.000
Mean: 0.302 abs SD: 0.4278

008L257-004
0.004 0.003
Mean: 0.003 abs SD: 0.0007

04 + 20
0.206 0.204

Mean: 0.205 abs SD: 0.0014

Sample 40

-0.001 0.000

Mean: -0.000 abs SD: 0.0007

CCV

0.287 0.273

Mean: 0.280 abs SD: 0.0099

Emma J Linlein
8/18/90
END TIME 00:15

~~.~~ . 30 31.PC 08

WESTON

AA FURNACE METALS ANALYSIS

updated

BOOK = 1803
PAGE = 79

LIMS FILE PB080803
START DATE, ANALYST 8/8/90 E Sinclair
CAL STD MFR/PREP DATE 8/8/90 Baker
ICV/CCV MFR/PREP DATE 6/21/90 IV

WAVELENGTH 283.3 nm
CORR COEF 0.9995
INSTRUMENT AA3.2

CLIENT ID	RFW BATCH /SAMPLE #	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	Blank	0	-0.4				
	CRA (3ppb)	0.026	2.6				
	STD1 (10ppb)	0.093	10.3				
	STD2 (25ppb)	0.229	25.9				
	STD3 (50ppb)	0.434	49.5				
	ICV (30ppb)	0.249	28.2		94		
	ICB	0	-0.4				
	CRA	0.025	2.5				
	9008L253-0055	0.137	15.4				
NA	9008L257-001	0.029	3.0		67	MSA	
8/16/90	+20	0.146	16.4				
	002	0.002	-0.1				
	+20	0.198	22.4		112		
	003	0.056	6.0	10	~~18~~	ES 8/16/90	
	+20	0.212	24.0		90		
	004	0.001	-0.3				
	+20	0.195	22.0		110		
	CCV	0.262	29.7		99		
	CCB	-0.002	-0.6				
	006	-0.001	-0.5			W	
	+20	0.112	12.5		62		
	007	0.002	-0.1				
	+20	0.197	22.3		111		
	008	0.003	-0.215				

END DATE/ANALYST: SUPERVISOR REVIEW/DATE: 8/16/90

AR302261

WESTEEN — AA FURNACE METALS ANALYSIS

BOOK = 1903
PAGE = 30

LIMS FILE Pb 080803 cont'd
START DATE/ANALYST
CAL STD MFR/PREP DATE
ICV/CCV MFR/PREP DATE

WAVELENGTH nm
CORR COEF
INSTRUMENT AA3.2

CLIENT ID	RFW BATCH /SAMPLE =	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	+20	0.192	21.7		108		
	9008L257-009	0.003	-0.0			W	
	+20	0.127	14.2		71		
	BI	-0.003					
	BI	-0.004					
	CCV	0.279	31.7		106		
	CCB	0.004	-0.8				
NA	9008L253-001	0.049					corr=0.9997
MPW 8/16/90	+10	0.116					x'= -7.3x2 y'= 0.0494
	+20	0.187					m = 0.00674
	+30	0.250					
	-001R	0.050					1=0.9999 x'= -7.2x2
	+10	0.120					y' = 0.0504
	+20	0.192					m = 0.00699
	+30	0.259					
	CCV	0.258	29.2		98		
	CCB	-0.002					
	9008L257-001	0.009					corr = 0.9998 x' = -1.9x2
	+10	0.064					m = 0.00534 y' = 0.0099
	+20	0.118					
	+30	0.169					
	CCV	0.273	30.1		103		
	CCB	-0.003	-0.7				
		AR302262					

END DATE/ANALYST:

SUPERVISOR REVIEW/DATE 8/16/90

WESTON

AA FURNACE METALS ANALYSIS

BOOK = 1826
PAGE = 91

S FILE Pb080803 cont'd
RT DATE, ANALYST
L STD MFR/PREP DATE
CV/CCV MFR/PREP DATE

WAVELENGTH 283.3 nm
CORR COEF
INSTRUMENT AA3 C

IENT ID	RFW BATCH /SAMPLE =	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	90071/08-002	0.170	19.2	50			
	+ 20	0.318	36.2		95		
	-005	0.070	7.7	50			
	+20	0.221	25.0		87		
	H_2O	-0.003	-0.7				
	CCV	0.242	27.4		91		
	CCB	-0.003					

MDL 8/16/90

MDL 8/16/90

EJS 8/18/90

DATE/ANALYST: 8/18/90

SUPE

DATE 8/16/90

AR302263

Atomic Spectroscopy Information Management Software - Data Collection Mode
Data File Name: PB080803 Date: 90/08/08 Time: 12 18
Method File Name: PB080803 Technique: Furnace

Begin Element: Lead 1

Blank
-0 001 -0 001
Mean -0 001 abs SD: 0 0000

uto-Zero Performed

CRA
0.025 0.026
Mean. 0.026 abs SD: 0.0007

STD 1
0 093 0.093
Mean. 0.093 abs SD: 0.0000

STD 2
0.227 0.231
Mean. 0.229 abs SD: 0.0028

STD 3
0.436 0 433
Mean: 0.434 abs SD: 0.0021

ICV
0.250 0.247
Mean: 0.249 abs SD: 0.0021 CV = 0.8

ICB
0.001 -0.001
Mean: 0.000 abs SD: 0.0014 CV = 0

CRA
0.025 0.025
Mean. 0.025 abs SD: 0.0000 CV = 0

9008L253-005S
0.137 0.138
Mean. 0.137 abs SD: 0.0007 CV = 0.5

9008L257-001
0 031 0.028
Mean. 0.029 abs SD: 0.0021 CV = 7.2

01 + 20
0.147 0.146
Mean: 0.146 abs SD: 0.0007 CV = 0.5

08L257-002
.002 0.003
Mean: 0.002 abs SD: 0.0007 CV = 35.0

2 + 20
198 0.198
Mean: 0.198 abs SD: 0.0000 CV = 0

AR 302264

Weston Analytics	
Case No. (s)	
SDG No. (s)	
Instrument (MD 8/10/90)	AA2.32
Background	BD
Integration Time	5seconds
Injection Vol.	10 µl
Cal STD Source	Baker
Analyst	MeD for EJS

9008L257-003
0.054 0.056
Mean: 0.055 abs SD: 0.0014 CV= 2.5

3 + 20
0.215 0.209
Mean. 0.212 abs SD: 0.0042 CV= 2.0

008L257-004
-0.001 0.002
Mean: 0.001 abs SD: 0.0021 CV= 210.0

04 + 20
0.196 0.194
Mean. 0.195 abs SD: 0.0014 CV= 0.7

CCV
0.261 0.264
Mean. 0.262 abs SD: 0.0021 CV= 0.8

CCB
-0.002 -0.001
Mean: -0.002 abs SD. 0.0007 CV= 35.0

008L257-006
-0.001 -0.001
Mean: -0.001 abs SD: 0.0000 CV=0

6 + 20
111 0.113
Mean: 0.112 abs SD. 0.0014 CV= 1.3

008L257-007
0.003 0.002
Mean: 0.002 abs SD: 0.0007 CV= 35.0

07 + 20
0.197 0.196
Mean: 0.197 abs SD: 0.0007 CV= 0.4

9008L257-008
0.002 0.003
Mean: 0.002 abs SD: 0.0007 CV= 35.0

08 + 20
0.194 0.191
Mean: 0.192 abs SD: 0.0021 CV= 1.1

008L257-009
0.001 0.004
Mean. 0.003 abs SD: 0.0021 CV= 70.0

09 + 20
0.127 0.127
Mean: 0.127 abs SD: 0.0000 CV=0

Blank
ample 27
-0.004 -0.002
Mean: -0.003 abs SD: 0.0014 CV= 46.7

Blank
Sample 28
-0 004 -0 004
Mean: -0.004 abs SD. 0.0000 CV=0

CCV
0.280 0 279
Mean 0 279 abs SD: 0.0007 CV=0.3

CCB
-0 004 -0 004
Mean -0 004 abs SD 0.0000 CV=0

9008L253-001 +0
Sample 31
0.051 0.048
Mean: 0.049 abs SD. 0.0021 CV=4.3

001 + 10
Sample 32
0.116 0.115
Mean 0.116 abs SD: 0.0007 CV=0.6

001 + 20
Sample 33
0.187 0.186
Mean. 0.187 abs SD: 0.0007 CV=0.4

001 + 30
Sample 34
0.250 0.251
Mean: 0.250 abs SD: 0.0007 CV=0.3

9008L253-001R+0
Sample 35
0.051 0.050
Mean: 0 050 abs SD: 0.0007 CV=1.4

001R+10
Sample 36
0.120 0 121
Mean 0.120 abs SD: 0.0007 CV=0.6

001R+20
Sample 37
0.192 0.192
Mean 0.192 abs SD: 0.0000 CV=0

001R+30
Sample 38
0.258 0.259
Mean: 0.259 abs SD: 0.0007 CV=0.3

CCV
Sample 39
0.259 0.257
Mean: 0.258 abs SD: 0.0014 CV=0.5

CCB
Sample 40
-0.002 -0.002
Mean: -0 002 abs SD: 0.0000 CV=0

9008L257-001
CCV
0.009 0.008
Mean. 0.009 abs SD: 0.0007 CV=7.1

001 + 10
CCB
0.064 0.065
Mean: 0.064 abs SD: 0.0007 CV=1.1

001+20
Sample 43
0.117 0.119
Mean: 0.118 abs SD: 0.0014 CV = 1.2

001+30
Sample 44
0.170 0.168
Mean. 0.169 abs SD: 0.0014 CV = 0.8

CCV
Sample 45
0.271 0.275
Mean: 0 273 abs SD: 0.0028 CV = 1.0

CCB
Sample 46
-0.003 -0.004
Mean: -0.003 abs SD: 0.0007 CV = 23.3

9007L108-002
Sample 47
0.167 0.172
Mean: 0.170 abs SD: 0.0035 CV = 2.1

002+20
Sample 48
0.319 0.317
Mean. 0.318 abs SD: 0.0014 CV = 0.4

9007L108-005
Sample 49
0.072 0.068
Mean: 0.070 abs SD: 0.0028 CV = 4.0

005+20
Sample 50
223 0.220
Mean: 0.221 abs SD: 0.0021 CV = 1.0

Blank
Sample 51
-0.003 -0.003
Mean: -0.003 abs SD: 0.0000 CV = 0

CCV
Sample 52
0.244 0.240
Mean: 0.242 abs SD: 0.0028 CV = 1.2

~~CCV~~ CCB
-0.003 -0.004
Mean: -0.003 abs SD: 0.0007 CV = 23.3

MCD 8/10/91

Maureen Doughty 8/16/91
for
Emma Sinclair

WESTEN

AA FURNACE METALS ANALYSIS

updated

BOOK = 1826
PAGE = 66

ICMS FILE P SE081001
START DATE/ANALYST 8/10/90 Maureen Doudt
FINAL STD MFR/PREP DATE Baker 8/10/90
CCV MFR/PREP DATE Inorganic Ventures 6/21/90

WAVELENGTH 196.0 nm
CORR COEF 0.9995
INSTRUMENT AA2.3

CLIENT ID	RFW BATCH /SAMPLE =	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	Autozero	0	0				Start time 15:18
	Std 1 (5)	0.014	5.0				
	Std 2 (10)	0.028	10.7				
	Std 3 (25)	0.064	25.5				
	Std 4 (50)	0.123	49.6				
	ICV	0.078	31.2		104		
	ICB	0.003	0.5				
	CRA	0.012	4.2				
	90L0876-MB1	0.003	0.5				
	MB1+10	0.029	11.1		111		
	90L0876-LC1	0.074	29.6		99		
	LC1+10	0.097	38.0		94		
	90L0876-LC2	0.070	27.9		93		
	LC2+10	0.092	36.9		90		
	9008L253-001	0.003	0.5				
	001+10	0.029	11.1		111		
	9008L253-001S	0.028	10.7				
	CCV	0.078	31.2		104		
	CCB	0.003	0.5				
	9008L253-001R	0.003	0.5				
	001R+10	0.027	10.3		103		
	9008L257-001	0.019	7.0				See MSA
	001+10	0.029	11.1		111		
	(cont'd)						

END DATE/ANALYST: 8/10/90 Maureen Doudt

SI AR302268 W/DATE:

WESTON

AA FURNACE METALS ANALYSIS

BOOK = 1826
PAGE = 67

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..IS FILE SE081CC1
..T DATE/ANALYST 8/10/90 SSQ
..STD MFR/PREP DATE 8/10/90 Baker
../CCV MFR/PREP DATE 6/21/90 Morg venter

WAVELENGTH 196.0 nm
CORR COEF 0.9995
INSTRUMENT AA23

..IENT ..D	RFW BATCH /SAMPLE =	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	9008L257-002	0.003	0.5				
	002+10	0.028	10.7		107		
	003	0.006	1.7				
	003+10	0.015	5.4		54	W	
	004	0.003	0.5				
	004+10	0.027	10.3		103		
	CCV	0.077	30.8		103		
	CCB	0.003	0.5				
	9008L253-005	0.003	0.5				
	005+10	0.025	9.5		95		
	005R	0.002	0.1				
	005R+10	0.027	10.3		103		
8/10/90	005S	0.026	9.9				
	9008L ~~253~~ 257 006	0.014	5.0				See MSA
	006+10	0.025	9.5		~~45~~ 40	MSA	
	007	0.002	0.1				
	007+10	0.026	9.9		99		
	CCV	0.073	29.1		97		
	CCB	0.002	0.1				
	9008L257-008	0.004	0.9				
	008+10	0.030	11.5		115		
	009	0.014	5.0				See MSA
	009+10	0.026	9.9		49	MSA	
	(Cont'd)						

..D DATE/ANALYST: 8/10/90 [signature]

SUPERVISOR REVIEW/DATE: [initials] 9/12/90

AR302269

WESTEEN

AA FURNACE METALS ANALYSIS

BOOK = 1826
PAGE = 68

ICMS FILE BE031001 cont
START DATE/ANALYST 8/10/90 BSC
FINAL STD MFR/PREP DATE 5/10/90 Baker
CCV/CCV MFR/PREP DATE 6/11/90 Inorg Ventures
WAVELENGTH 1960 nm
CORR COEF .99995
INSTRUMENT 3733

CLIENT ID	RFW BATCH /SAMPLE #	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	9008L953-003	0.002	0.1				
	003+10	0.028	10.7		107		
	90L0901 ~~-MB1~~ -LC2	0.072	28.7		96		
	~~MB1~~ LC2 +10	0.094	37.8		90		
	90L0901-LC1	0.073	29.1		97		
	LC1+10	0.093	37.3		82		
	CCV	0.076	30.4		101		
	CCB	0.003	0.5				
	90L0901-~~LC2~~ MB1	0.003	0.5				
	~~LC2~~ MB1 +10	0.028	10.7		107		
	9007L077-001	0.007	2.1				
	001+10	0.020	7.4		53	W	
	001R	0.004	0.9				
	001R+10	0.021	7.8		78	W	
	001S	0.019	7.0				
	002	0.005	1.3				
	002+10	0.020	7.4		61	W	
	CCV	0.074	29.6		98		
	CCB	0.002	0.1				
	023	0.004	0.9				
	003+10	0.020	7.4		74	W	
	006	0.004	0.9				
	006+10	0.020	7.4		74	W	
	(Cont'd)						

METHOD DATE/ANALYST: 8/10/90

SUPERVISOR REVIEW/DATE: 8/12/90

WESTON

AA FURNACE METALS ANALYSIS

BOOK = 1826
PAGE = 69

LIMS FILE 8E081001
START DATE/ANALYST 8/10/90 SSG
CAL STD MFR/PREP DATE 5/10/90 Baker
CCV/CCV MFR/PREP DATE 6/21/90 Inorg. Venture

WAVELENGTH 1960 nm
CORR COEF 0.9995
INSTRUMENT AA3-3

CLIENT ID	RFW BATCH /SAMPLE =	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	007	0.005	1.3				
	007+10	0.021	7.8		78	W	
	008	0.005	1.3				
	008+10	0.021	7.8		78	W	
	CCV	0.070	27.9		93		
	CCB	0.001	-0.4				
	9008L257-001	0.006				S	r = 0.9996
	001+10	0.023					x' = -4.1 x 2
	001+20	0.039					y' = 0.0065
	001+30	0.054					m = 0.016
	9008L257-006	0.008				S	r = 1.0000
	006+10	0.023					x' = -5.3 x 2
	006+20	0.038					y' = 0.008
	006+30	0.053					m = 0.0015
	CCV	0.071	28.3		94		
	CCB	0.003	0.5				
	9008L257-009	0.007				S	r = 0.9993
	009+10	0.022					x' = -4.5 x 2
	009+20	0.039					y' = 0.007
	009+30	0053					m = 0.0015
	CCV	0.073	29.1		97		
	CCB	0.003	0.5				

DATE/ANALYST: 8/10/90

AR302271

SUPERVISOR REVIEW/DATE: 8/12/90

(3)

Atomic Spectroscopy Information Management Software - Data Collection Mode
Data File Name: SE081001 Date: 89/08/10 Time: 15 18
Method File Name: SE081001 Technique: Furnace

Begin Element Selenium

Weston Analytics
Case No. (s)
SDG No. (s)
Instrument AA2:3
Background Zeeman
Integration Time 6 Sec
Injection Vol. 20 UL
Cal STD Source Baker
Analyst DDC

Blank
-0.005 -0.005
Mean -0.005 Abs SD: 0.0000

Auto-Zero Performed

CRA
0.014 0.014
Mean: 0.014 Abs SD: 0.0000

STD 2
0.028 0.028
Mean: 0.028 Abs SD 0.0000

STD 3
0.064 0.064
Mean 0.064 Abs SD: 0.0000

STD 4
0.123 0.123
Mean 0.123 Abs SD: 0.0000

ICV 1
0.078 0.078
Mean 0.078 Abs SD: 0.0000

ICB 1
0.003 0.002
Mean: 0.003 Abs SD: 0.0007 CV-23.3

CRA
0.011 0.014
Mean: 0.012 Abs SD: 0.0021 CV-17.5

9OLO876-MB 1
0.003 0.004
Mean 0.003 Abs SD: 0.0007 CV-23.3

MB 1 + ~~20~~ 10 DQS 10/19/90
0.029 0.029
Mean: 0.029 Abs SD: 0.0000

9OLO876-LC 1
0.073 0.075
Mean: 0.074 Abs SD: 0.0014 CV-1.9

DQS 10/19/90 AR3022PT2

LC 1 + ~~20~~ 10
0.098 0.097

OL0876-LC2
0.070 0.070
Mean: 0.070 Abs SD: 0.0000

C2 + ~~20~~ 10 ml 8/10/90
0.092 0.093
Mean: 0.092 Abs SD: 0.0007 CV-0.8

008L253-001
0.004 0.003
Mean: 0.003 Abs SD: 0.0007 CV-23.3

001 + ~~20~~ 10 ml 8/10/90
0.029 0.029
Mean: 0.029 Abs SD: 0.0007 CV-2.4

008L253-001S
0.029 0.028
Mean: 0.028 Abs SD: 0.0007 CV-2.5

CV
0.079 0.078
Mean: 0.078 Abs SD: 0.0000

CB
0.003 0.004
Mean 0.003 Abs SD: 0.0007 CV-23.3

008L253-001R
0.002 0.003
Mean: 0.003 Abs SD: 0.0007 CV-23.3

[redacted]1R + ~~20~~ 10 ml 8/10/90
0.027 0.027
Mean 0.027 Abs SD: 0.0000

008L257-001
0.021 0.016
Mean: 0.019 Abs Beemist SD: 0.0035 CV-18.4

01 + ~~20~~ 10 ml 8/10/90
0.030 0.027
Mean: 0.029 Abs SD: 0.0021 CV-7.2

008L257-002
0.004 0.003
Mean: 0.003 Abs SD: 0.0007 CV-23.3

02 + ~~20~~ 10 ml 8/10/90
0.028 0.028
Mean 0.023 Abs SD: 0.0000

008L257-003
0.006 0.006
Mean: 0.006 Abs SD: 0.0000

[redacted]3 + ~~20~~ 10 ml 8/10/90
0.015 0.016
Mean: 0.015 Abs SD: 0.0007 CV-4.7

008L257-004
0.004 0.002
Mean: 0.003 Abs SD: 0.0014 CV-48.7

0 027 0 027
Mean 0 027 Abs SD 0 0000

CCV
0.074 0 079
Mean 0 077 Abs SD. 0.0035 CV-4.5

CCB
0 004 0.003
Mean. 0.003 Abs SD C 0007 CV-.233

@008L253-005
0 004 0 002
Mean 0 003 Abs SD. 0 0014 CV-47

005 + 10
0 025 0.025
Mean 0 025 Abs SD. 0.0000

@008L253-005R
0 002 0.003
Mean 0 002 Abs SD 0.0007 CV-35

005R + ~~20~~ 10 ~~DD~~ 8/10/90
C.027 0 028
Mean 0 027 Abs SD: 0.0007 CV-2.6

@008L253-005S
0 026 0.027
Mear 0 026 Abs SD: 0 0007 CV-2.7

@008L257-006
0 014 0 013
Mean 0 014 Abs See MSA SD: 0.0007 CV-5.0

006 + ~~20~~ 10 ~~DD~~ 8/10/90
C 025 0 025
Mear 0 025 Abs SD 0 0000

@008L257-007
0 002 0 002
Mean 0 002 Abs SD 0.0000

007 + ~~20~~ 10 ~~DD~~ 8/10/90
0 025 0 026
Mean 0 026 Abs SD: 0 0007 CV-2.7

CCV
0 072 0.073
Mean 0.073 Abs SD: 0.0007 CV-0 9

CCB
0 002 0 002
Mean 0.002 Abs SD: 0.0000

@008L257-008
0 004 0 003
Mean 0.004 Abs SD: 0.0007 CV-17.5 AR304

008 + ~~20~~ 10 ~~DD~~ 8/10/90
0 029 0 031
Mean 0 030 Abs SD: 0.0014 CV-4.7 AR302274

)008L257-009
0 014 0.014 See MSA

009 + 010
0.026 0.026
Mean: 0.026 Abs SD: 0.0000

~~ICV~~ 9008L253-003
0.003 0.002
Mean: 0.002 Abs SD: 0.0007 CV=35

~~ICB~~ 003+10
0.028 0.029
Mean 0.028 Abs SD: 0.0007 CV=2.5

90L0901-LC2
~~Sample 48~~
0.071 0.072
Mean 0.072 Abs SD: 0.0007 CV=1.0

LC2+10
~~Sample 49~~
0.093 0.094
Mean: 0.094 Abs SD: 0.0007 CV=0.7

90L0901-LC1 DR 8/10/90
~~Sample 50~~
0.071 0.074
Mean: 0.073 Abs SD: 0.0021 CV=2.9

LC1+10 DR 8/10/90
~~Sample 54~~
0.094 0.093
Mean 0.093 Abs SD: 0.0007 CV=0.7

CCV DR 8/10/90
~~Sample 52~~
0.076 0.077
Mean: 0.076 Abs SD: 0.0007 CV=0.9

CCB DR 8/10/90
~~ICV~~
0.004 0.003
Mean: 0.003 Abs SD: 0.0007 CV=23.3

~~CCB~~ 90L0901-MB1 DR 8/10/90
0.002 0.003
Mean: 0.003 Abs SD: 0.0007 CV=23.3

MB1+10 DR 8/10/90
~~Sample 55~~
0.028 0.027
Mean: 0.028 Abs SD: 0.0007 CV=2.5

9007L077-001 DR 8/10/90
~~Sample 56~~
0.007 0.007
Mean 0.007 Abs SD: 0.0000

001+10 DR 8/10/90
~~Sample 57~~
0.021 0.019
Mean: 0.020 Abs SD: 0.0014 CV=7.0

9007L077-001R DR 8/10/90
~~Sample 58~~
0.004 0.004
Mean: 0.004 Abs SD: 0.0000

001R+10 DR 8/10/90
~~Sample 59~~
0.020 0.021
Mean 0.021 Abs SD: 0.0007 CV=3.3

9007L077-001S DR 8/10/90
~~Sample 60~~
0.019 0.019
Mean: 0.019 Abs SD: 0.0000

9007L077-002 DR 8/10/90

0 006 0 005
Mean 0 005 Abs SD 0 0007 CV=14

002 +10 8/10/90
~~Sample 62~~
0 020 0.020
Mean: 0 020 Abs SD 0.0000

CCV 8/10/90
~~Sample 63~~
0 073 0.075
Mean: 0 074 Abs SD: 0.0014 CV=1.9

CCB 8/10/90
~~Sample 64~~
0 002 0 002
Mean 0 002 Abs SD: 0.0000

CCV 900 7L077-003
0.005 0.004 8/10/90
Mean 0 004 Abs SD: 0 0007 CV=17.5

~~CCB~~ 003 +10 8/10/90
0 021 0.020
Mean 0 020 Abs SD: 0 0007 CV=3.5

006
900 7L077-~~006~~ 200 8/10/90
~~Sample 67~~
0 004 0 004 8/10/90
Mean 0 004 Abs SD: 0 0000

606 +10 8/10/90
~~Sample 68~~
0 020 0 019
Mean 0 020 Abs SD: 0 0007 CV=3.5

900 7L077-007 8/10/90
~~Sample 69~~
0.005 0.005
Mean: 0 005 Abs SD: 0.0000

007 +10 8/10/90
~~Sample 70~~
0 021 0 022
Mean: 0.021 Abs SD: 0.0007 CV=3.3

900 7L077-008 8/10/90
~~Sample 71~~
0 005 0.004
Mean: 0 005 Abs SD: 0.0007 CV=14

008 +10 8/10/90
~~Sample 72~~
0 021 0.021
Mean: 0.021 Abs SD: 0.0000

CCV 8/10/90
~~Sample 73~~
0.069 0.071
Mean: 0.070 Abs SD: 0.0014 CV=2.0

CCB 8/10/90
~~Sample 74~~
0.001 0.002
Mean 0.001 Abs SD: 0.0007 CV=70

900 8L257-001 8/10/90
~~Sample 75~~
0 007 0.006
Mean: 0.006 Abs SD: 0.0007 8/10/90

001 +10 8/10/90
~~Sample 76~~
0.022 0.024
Mean: 0 023 Abs SD: 0.0014 CV=6.1

001 +20 8/10/90
~~CCV~~
0.039 0.039
SD: 0.0000

AR302276

0 053 0 055 8/10/90
Mean: 0.054 Abs SD: 0 0014 CV = 2.6

~~Sample 79~~ 9008L257-006 8/10/90
0 008 0.008
Mean: 0.008 Abs SD: 0 0000

~~Sample 80~~ 006+10 8/10/90
0 022 0.023
Mean: 0.023 Abs SD: 0 0007 CV = 3.0

~~Sample 81~~ 006+20 8/10/90
0.039 0.037
Mean: 0 038 Abs SD: 0.0014 CV = 3.7

~~Sample 82~~ 006+30 8/10/90
0 053 0.054
Mean: 0 053 Abs SD: 0.0007 CV = 1.3

~~Sample 83~~ CCV 8/10/90
0.071 0.070
Mean: 0 071 Abs SD: 0.0007 CV = 1.0

~~Sample 84~~ CCB 8/10/90
0 003 0.003
Mean: 0 003 Abs SD: 0.0000

~~Sample 85~~ 9008L257-009 8/10/90
0.006 0.007
Mean: 0.007 Abs SD: 0.0007 CV = 10

~~Sample 86~~ 009+10 8/10/90
022 0.022
Mean: 0.022 Abs SD: 0.0000

~~Sample 87~~ 009+20 8/10/90
0.038 0.039
Mean: 0 039 Abs SD: 0.0007 CV = 1.8

~~Sample 88~~ 009+30 8/10/90
0.053 0.053
Mean: 0.053 Abs SD: 0.0000

CCV
0.073 0.074
Mean: 0.073 Abs SD: 0.0007 CV = 1.0

CCB
0.002 0.003
Mean: 0.003 Abs SD: 0.0007 CV = 23.3

8/10/90 11:15

WESTON

AA FURNACE METALS ANALYSIS

BOOK = 1826
PAGE = 60

LIMS FILE TL080910
START DATE/ANALYST 8/19/90 SSQ
CAL STD MFR/PREP DATE 8/19/90 RICCA
ICV/CCV MFR/PREP DATE 6/22/90 Morg. Venture

WAVELENGTH 276.8 nm
CORR COEF 0.9996
INSTRUMENT AA2

CLIENT ID	RFW BATCH /SAMPLE =	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	BZ	0	0				
	Std1 (10ppb)	0.088	10.0				
	Std3 (15ppb)	0.134	15.6				
	Std3 (25ppb)	0.215	25.4				
	Std4 (50ppb)	0.416	49.6				
	ICV	0.250	29.8 29.5		98		
	ICB	-0.009	-1.7				
	CRA	0.089	10.1				
	9010876-MB1	-0.004	-1.1				
	MB1+20	0.171	20.0		100		
	LC1	0.232	27.4		91		
	LC1+20	0.392	46.7		97		
	LC2	0.216	25.5		85		
	LC2+20	0.349	41.5		80		
	9008L253-001	-0.005	-1.2				
	001+20	0.139	16.2		81	W	
	Blank	-0.004	-1.1				
	CCV	0.246	29.1		97		
	CCB	-0.004	-1.1				
	9008L253-001R	-0.005	-1.2				
	001R+20	0.142	16.5		83	W	
	001S	0.191	22.5		2		
	9008L253-003	-0.002	-0.8				
	003+20	0.147	17.1		85		

DATE/ANALYST: 8/19/90

SUPERVISOR REVIEW/DATE: 8/19/90

WESTON

AA FURNACE METALS ANALYSIS

BOOK = 1926
PAGE = 61

ICMS FILE TL080910
START DATE/ANALYST 8/9/90 850
CAL STD MFR/PREP DATE 8/9/90 RICCA
ICV/CCV MFR/PREP DATE 8/21/90 Morg. Newton

WAVELENGTH 276.8 nm
CORR COEF 0.9996
INSTRUMENT AA3

CLIENT ID	RFW BATCH /SAMPLE =	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	9008L257-001	-0.009	-1.7				
	001 +20	0.114	13.2		65	W	
	002	-0.001	-0.7				
	002 +20	0.155	18.1		90		
	blank	-0.002	-0.8				
	CCV	0.244	28.9		96		
	CCB	-0.003	-1.0				
	9008L257-003	-0.002	-0.8				
	003 +20	0.123	14.3		71	W	
008 8/9/90	004	-0.008	-1.6				
	004+20	0.145	16.9		84	W	
	9008L253-005	-0.000	-0.6				
	005+20	0.122	14.1		70	W	
	005R	-0.002	-0.8				
	005R+20	0.136	15.8		79	W	
	005S	0.182	21.4	2			
	Blank	0.001	-0.5				
	CCV	0.243	28.7		95		
	CCB	-0.002	-0.8				
	9008L257-006	-0.003	-1.0				
	006 +20	0.115	133		66	W	
	007	-0.001	-0.7				
	007 +20	0.143	16.7		83	W	
	(cont'd)						

DATE/ANALYST: 8/9/90 [signature]

SUPERVISOR REVIEW/DATE: [signature] 8/10/90

WESTERN

AA FURNACE METALS ANALYSIS

BOOK = 1426
PAGE = 62

IMS FILE TL080910
START DATE/ANALYST 8/9/90 BCQ
CAL STD MFR/PREP DATE 8/9/90 RICCA
CCV/CCV MFR/PREP DATE 8/9/90 Inorg. Ventures

WAVELENGTH 276.8 nm
CORR COEF 0.9996
INSTRUMENT AA3.3

CLIENT ID	RFW BATCH /SAMPLE #	ABS @	UG/L	DIL	%R	QC FLAG	COMMENTS, MSA, START/END TIME, ETC.
	9008L257-008	0.005	-0.0				
	008+20	0.144	16.8		84	W	
	9008L257-009	0.009	0.5				
	009+20	0.125	14.5		72	W	
	9007L108-009	-0.002	-0.8	10			
	009+20	0.148	17.3	10	86		
	CCV	0.237	28.0		93		
	CCB	-0.002	-0.8				
N/A	90L0905-MB1	0.001	-0.5				
8/9/90	LC1	0.207	24.4		81		
	LC2	0.215	25.4		84		
	9008L247-002	0.002	-0.4				
	CCV	0.232	27.4		91		
	CCB	-0.002	-0.8				

8/9/90

DATE/ANALYST: 8/9/90

SUPERVISOR REVIEW/DATE: 8/10/90

(3)

Atomic Spectroscopy Information Management Software - Data Collection Mode
Data File Name: TL080910 Date: 89/08/09 Time: 16 39
Method File Name: TL080910 Technique: Furnace

Begin Element Thallium

Blank
-0.004 -0.001
Mean -0.002 Abs SD 0.0021

Auto-Zero Performed

Blank
-0.005 -0.015
Mean: -0.010 Abs SD: 0.0071

Auto-Zero Performed

STD1 [10 PPB]
0.006 0.005
Mean: 0.005 Abs SD 0.0007

Restart Element Thallium

Blank
0.012 0.012
Mean: 0.012 Abs SD: 0.0000

Auto-Zero Performed

STD1 [10 PPB]
0.087 0.089
Mean: 0.088 Abs SD: 0.0014

STD2 [15 PPB]
0.134 0.134
Mean: 0.134 Abs SD: 0.0000

STD3 [25 PPB]
0.221 0.208
Mean 0.215 Abs SD: 0.0092

STD4 [50 PPB]
0.414 0.419
Mean: 0.416 Abs SD: 0.0035

ICV1 [30 PPB]
0.253 0.247
Mean: 0.250 Abs SD: 0.0042 CV=1.7

ICB1
-0.007 -0.011
Mean: -0.009 Abs SD: 0.0028

CRA [10 PPB]
0.091 0.086
Mean: 0.089 Abs SD: 0.0035 CV=3.9

TL0876-MB1
-0.002 -0.005
Mean -0.004 Abs SD: 0.0021

MB1 + 20
0.170 0.171

Weston Analytics

Case No. (s) _____
SDG No. (s) _____
Instrument 4A2-3
Background Zeeman
Integration Time 5 sec
Injection Vol. 20 uL
Cal STD Source RICCA
Analyst SSB

9OLO876-LC1
0.218 0.246
Mean 0.232 Abs SD 0.0198 CV= 8.5

LC1 + 20
0.397 0.386
Mean 0.392 Abs SD 0.0078 CV=2.0

9OLO876-LC2
0.226 0.206
Mean 0.216 Abs SD: 0.0141 CV=6.5

LC2 + 20
0.354 0.345
Mean 0.349 Abs SD 0.0064 CV=1.8

9008L253-001
-0.003 -0.002
Mean -0.005 Abs SD: 0.0050

001 + 20
0.145 0.134
Mean 0.139 Abs SD: 0.0078 CV=5.6

Blank
-0.006 -0.002
Mean -0.004 Abs SD: 0.0029

CCV [30 PPB]
0.248 0.245
Mean 0.246 Abs SD: 0.0021 CV=0.9

CCB
0.000 -0.009
Mean -0.004 Abs SD 0.0064

9008L253-001R
-0.008 -0.002
Mean -0.005 Abs SD: 0.0042

001R + 20
0.146 0.138
Mean 0.142 Abs SD: 0.0057 CV=4.0

9008L253-001S
0.190 0.187
Mean 0.191 Abs SD 0.0064 CV=3.4

9008L253-003
-0.002 -0.003
Mean -0.002 Abs SD: 0.0007

003 + 20
0.143 0.150
Mean 0.147 Abs SD 0.0050 CV=3.4

9008L257-001
-0.005 -0.012
Mean -0.009 Abs SD 0.0050

001 + 20
0.118 0.111
Mean 0.114 Abs SD: 0.0050 CV=4.4

-0 002 0 000
Mean -0 001 Abs SD 0.0014

002 + 20
0 154 0.155
Mean 0 155 Abs SD: 0 0007 CV-0.5

ank
-0 004 0.000
Mean -0 002 Abs SD 0.0029

CV [30 PPB]
0 249 0.240
Mean 0 244 Abs SD 0 0064 CV-2.6

CB
0 002 -0.008
Mean -0 003 Abs SD 0.0071

008L257-003
-0 001 -0 004
Mean -0 002 Abs SD 0 0021

003 + 20
0 120 0 125
Mean: 0 123 Abs SD 0.0035 CV-2.8

008L257-004
-0.007 -0.008
Mean -0.008 Abs SD: 0 0007

004 + 20
0.147 0 144
Mean: 0 145 Abs SD: 0.0021 CV-1.4

008L253-005
-0.001 0.000
Mean -0.000 Abs SD: 0.0007

005 + 20
0 120 0 124
Mean: 0 122 Abs SD 0.0028 CV-2.3

008L253-005R
0 001 -0.005
Mean: -0.002 Abs SD: 0.0042

005R + 20
0.132 0.139
Mean 0.136 Abs SD: 0.0050 CV-3.7

008L253-005S
0.178 0 187
Mean: 0 182 Abs SD 0.0064 CV-3.5

BLANK
0.002 0 000
Mean: 0 001 Abs SD: 0.0014 CV-146

CV [30 PPB]
0.247 0.239
Mean: 0.243 Abs SD 0.0057 CV-2.3

CCB
-0 002 -0.002

9008L257-006
-0 001 -0 004
Mean -0 003 Abs SD 0.0021

005 + 20
0 119 0 111
Mean: 0.115 Abs SD 0.0057 CV-4.9

9008L257-007
-0 001 -0.002
Mean -0 001 Abs SD: 0 0007

007 + 20
0 141 0 145
Mean: 0.143 Abs SD 0 0028 C.V-1.9

9008L257-008
0 010 -0 001
Mean 0 005 Abs SD: 0.0078 CV-156

008 + 20
0.145 0 144
Mean 0.144 Abs SD: 0.0007 CV-0.5

9008L257-009
0.008 0.011
Mean 0.009 Abs SD: 0.0021 CV-233

009 + 20
0 122 0 128
Mean 0 125 Abs → 8/9/90 SD: 0.0042 CV-3.4

9007L108-009 X10
~~Sample 51~~
-0.001 -0 003
Mean -0 002 Abs 8/9/90 SD: 0.0014

009+20.8 X10
~~Sample 52~~
0.144 0.152
Mean 0.148 Abs SD: 0.0057 CV-3.9

CCV [30 PPB]
0 238 0.237
Mean 0.237 Abs SD: 0.0007 CV-0.3

CCB
-0.003 -0.002
Mean -0.002 Abs SD: 0.0007

9CL0905-MB1 8/9/90
~~Sample 55~~
-0 001 0.003
Mean: 0.001 Abs SD: 0.0028 CV-280

9CL0905-LC1 8/9/90
Sample 56
0 193 0 221
Mean. 0.207 Abs SD: 0.0198 CV-9.6

9CL0905-LC2 8/9/90
~~Sample 57~~
0.223 0.208
Mean: 0.215 Abs SD: 0.0106 CV-4.9

9008L247-002 8/9/90
~~Sample 58~~
-0 005 0.002
Mean: -0 002 Abs SD: 0.005

CCV → 8/9/90

AR302284

Mean 0 232 ABS CCB 8/9/90 SD 0 0035 CV 1.5

~~Sample 60~~

0 001 -0 004

Mean -0.002 ABS SD 0 0055

8/11/90 11:30

MERCURY

WESTEN

MERCURY PREPARATION/ANALYSIS

BOOK = 173&24
PAGE = 130

ANALYSIS DATE/ANALYST 8/7/90 J. Jeffrey Welsh
CAL STD MFR/LOT =/PREP DATE [illegible]/8-6-90
ICV/CCV MFR/LOT =/PREP DATE Inorganic Ventures/EIMS/8-6-90
CORR COEF .9996
LIMS FILE H60807Q1

PREP FILE/ DATE/ INIT	RFW BATCH /SAMPLE #	BOTTLE =	CLIENT ID	SAMPLE WT/VOL	SPK AMT	DIL	ABS @ 253.7 nm	UG/L or MG/KG	%R	COMMENTS/ % SOLIDS/ ETC. TIME
900120	blank	111					0			0941
J.J.W.	0.2 ug/l	1					1			
8-6-90	1.0 ug/l	21					5			
	5.0 ug/l	14B					28			
	10.0 ug/l	27					63			
	20.0 ug/l	44					125			
	ICV	117		100 ml	5		33	5.398 ug/l	108	0959
	ICB	13A					-1	<0.2		1002
	MB1	39					-2	<0.2		1003
	MB2	45					0	<0.2		1005
	LC1	1001			5		36	5.874	118	1006
	LC2	46A			5		36	5.874	118	1010
	9008L253-001	7	CLP DEL				0	<0.2		1014
	001r	15					0	<0.2		1015
	001s	68			1		6	1.107	111	1016
	005	2AB					0	<0.2		1018
	005r	22					-1	<0.2		1019
	005s	36			1		6	1.107	111	1020
	CCV1	46B			5		36	5.874	118	1022
	CCB1	20					-1	<0.2		1025
	003	8AB					-1	<0.2		1027
	9008L267-001	22					-1	<0.2		1028
	002	4B					-1	<0.2		1029

9008L253

ANALYST REVIEW/DATE:
J. Jeffrey Welsh 8/7/90

SUPERVISOR REVIEW/DATE:

MW21-11-018/6-1/90

AR302287

WESTON

MERCURY PREPARATION/ANALYSIS

BOOK = 173612
PAGE = 131

ANALYSIS DATE/ANALYST 8/7/90 J. Jeffrey Walsh
CAL STD MFR/LOT #/PREP DATE [illegible] 130
ICV/CCV MFR/LOT #/PREP DATE [illegible] 130

CORR COEF 0.9996
LIMS FILE HG080701

PREP FILE/ DATE/ INIT	RFW BATCH /SAMPLE #	BOT- TLE #	CLIENT ID	SAMPLE WT/VOL	SPK AMT	DIL	ABS @ 253.7 nm	UG/L or MG/KG	%R	COMMENTS/ % SOLIDS/ ETC.	TIME
90C120	9008L257-003	123	CLP DEL	100 ml			5	0.948 ug/l			1030
8-6-90	004	52					0	<0.2			1032
J.J.W.	006	6A					-1	<0.2			1033
	007	23					-1	<0.2			1034
	008	10					-1	<0.2			1035
	009	18					-1	<0.2			1036
	9008L276-001	4A	CLP-DEL				-1	<0.2			1037
	CCV 2	19			5		35	5.715	114		1038
	CCB 2	63					0	<0.2			1042
	9007L194-002	65					0	<0.2			1054
	002r	112					1	0.312			1055
	002s	132			1		4	0.789	80		1057
	9008L260-002	46					1	0.312			1059
	002+2	56					13	2.229	111		1100
	9008L266-001	16	CLP DEL	0.2g			0	<3.4 mg/kg		2.25%	1102
	001r	56					0	<3.4		2.25%	1103
	001s	92					6	24.597	111	2.25%	1104
	9007L192-002	135					1	0.380		41.06%	1109
	004	34					5	0.833		56.87%	1110
	CCV 3	11A		100 ml	5		36	5.874 ug/l	118		1111
	CCB 3	12					0	<0.2			1115
	9007L192-011	17					0	<0.2			1116
	011+2	119					[illegible]	2.[illegible]	135		1117

ANALYST REVIEW/DATE: J. Jeffrey Walsh 8/7/90

SUPERVISOR REVIEW/DATE:

WW21-2[illegible]-3/90

AR302288

WESTON

MERCURY PREPARATION/ANALYSIS

BOOK = 1736
PAGE = 132

ANALYSIS DATE/ANALYST 8/7/90 J. Jeffrey Welsh
CAL STD MFR/LOT =/PREP DATE [illegible]/90
ICV/CCV MFR/LOT =/PREP DATE [illegible]/30

CORR COEF 0.9996
LIMS FILE HG080701

PREP FILE/ DATE/ INIT	RFW BATCH /SAMPLE #	BOT- TLE =	CLIENT ID	SAMPLE WT/VOL	SPK AMT	DIL	ABS @ 253.7 nm	UG/L or MG/KG	%R	COMMENTS/ % SOLIDS/ ETC.
900120	90072192-012	10		100ml			0	<0.2ug/l		1118
8-6-90	012+2	41A		⊥			15	2.537 ⊥	127	1120
jjW.	90082237-002	11		0.2g			0	<0.1 mg/kg		97.61 1122
	008	5		⊥			0	<0.1 ⊥		79.67 1123
	CCV 4	21		100ml	5		37	6.0 ug/l	120	1124
⊥	CCB 4	29		⊥			0	<0.2 ⊥		1129

J. Jeffrey Welsh 8/6/90

ANALYST REVIEW/DATE: J. Jeffrey Welsh 8/7/90

SUPERVISOR REVIEW/DATE:

[illegible]

AR302289

SIGNAL: AA-BG
INTEG. TIME: 20.0sec
CALIBRATION TYPE: Linear

LAMP CURRENT: 6 mA
EXPANSION: 1.00
ENERGY: 49

Standard1: 0.2
Standard3: 5.0
Standard5: 20.0

Standard2: 1.0
Standard4: 10.0

HG080701
8/7/90
J. Jeffrey Welch

ABSORBANCE:
-0.000 blank

ABSORBANCE:
0.001 0.2 ug/l

ABSORBANCE:
0.005 1.0 ug/l

ABSORBANCE:
0.028 5.0 ug/l

ABSORBANCE:
0.063 10.0 ug/l

ABSORBANCE:
0.125 20.0 ug/l

ABSORBANCE:
0.033 ICV

ABSORBANCE:
-0.001 ICB

ABSORBANCE:
-0.002 MB1

ABSORBANCE:
-0.000 MB2

ABSORBANCE:
0.036 LCS1

ABSORBANCE:
0.036 LCS2

ABSORBANCE:
0.000 9008L253-001

ABSORBANCE:
-0.000 9008L253-002

ABSORBANCE:
0.006 9008L253-004S

ABSORBANCE:
-0.000 9008L253-005

ABSORBANCE:
-0.001 9008L253-005R

ABSORBANCE:
0.006 9008L253-005S

ABSORBANCE:
0.036 CCV1

ABSORBANCE:
-0.001 CCB1

ABSORBANCE:
-0.001 9008L253-003

ABSORBANCE:
-0.001 9008L257-001

ABSORBANCE:
-0.001 9008L257-002

ABSORBANCE:
0.005 9008L257-003

ABSORBANCE:
-0.000 9008L257-004

ABSORBANCE:
-0.001 9008L257-006

ABSORBANCE:
-0.001 9008L257-007

ABSORBANCE:
-0.001 9008L257-008

ABSORBANCE:
-0.001 9008L257-009

ABSORBANCE:
-0.001 9008L276-001

ABSORBANCE:
0.035 CCV2

ABSORBANCE:
-0.000 CCB2

ABSORBANCE:
0.000 9007L194-002

ABSORBANCE:
0.001 9007L194-002

ABSORBANCE:
0.004 9007L194-002S

ABSORBANCE:
0.001 9008L260-002

ABSORBANCE:
0.013 9008L260-002+2

ABSORBANCE:
0.000 9008L266-001

ABSORBANCE:
0.000 9008L266-001

ABSORBANCE:
0.006 9008L266-001S

ABSORBANCE:
0.001 9007L192-002

ABSORBANCE:
0.005 9007L192-004

ABSORBANCE:
0.036 CCV3

ABSORBANCE:
0.000 CCB3

ABSORBANCE:
-0.000 9007L192-011

ABSORBANCE:
0.016 9007L192-011+2

ABSORBANCE:
0.000 9007L192-012

ABSORBANCE:
0.015 9007L192-012+2

ABSORBANCE:
0.000 9008L237-002

ABSORBANCE:
-0.000 9008L237-008

ABSORBANCE:
0.037 CCV4

ABSORBANCE:

CYANIDE

WESTON

CYANIDE ANALYSIS LOG

DISTILLATION DATE: 08/06/90

ANALYSIS DATE: 08/06/90

ANALYST: P.M. Patel

WORK SHEET: CN080690

RUN BATCH: 90LC258 (W1)

PREP BATCH	RUN #	QC	ABS @ 578 nm	FINAL RESULTS mg/L / mg/kg	TIME HH:MM	COMMENTS
Calibration Standard	BLANK	Aldrich	0.003		9:00 PM	
	~~LCS-1~~ 10 ug/l		0.018			
	20 ug/l		0.034			
	50 ug/l		0.082			
	100 ug/l		0.162			
	200 ug/l		0.324			
90LC258	ICV	100 ug/l Fisher	0.160	99.3	9:05 PM	
	ICB		0.002	<10	9:05 PM	
	PREP BLANK		0.003			
	LCS-1		0.308	94.8		
	LCS-2		0.306	94.6		
	9008L253 -001		0.006			
	-001R		0.004			
	-001S		0.296	91.4		
	-003		0.004			
	9008L257 -001		0.004			
	-002		0.005			
	-003		0.007			
	CCV		0.162	99.5	9:35 PM	
↓	CCB		0.002	<10	9:35 PM	

REVIEWED BY: [signature]

DATE: 8/14/90

RFW21-21-016/E-12/89

AR302295

WESTON

CYANIDE ANALYSIS LOG

DISTILLATION DATE: 08/06/90

ANALYSIS DATE: 08/06/90

ANALYST: P M Patel

WORK SHEET: CN080690

RUN BATCH: 90LC258 (W)

PREP BATCH	RUN #	QC	ABS @ 578 nm	FINAL RESULTS mg/L / mg/kg	TIME HH:MM	COMMENTS
90LC258	-004		0.005			
	90-08L251 -002		0.004			
	90-08L253 -002		0.010			
	CCV		0.161	98.9	9:40 P.M	
	CCB		0.003	<10	9:40 P.M	

Barbel 08/06/90

REVIEWED BY: [signature]

DATE: 8/14/90

RFW21-21-016/E-12/89

WESTON

CN DISTILLATION

PREP BATCH ID 90LC258 (W)

PFW #	QC	CLIENT	FLASK #	INIT. VOL (mL/s)	FINAL VOL (mL)	NOTES
BLANK			1	500 ml	250 ml	
LCS-1			2			5 ml of 10PPM CN STD [ALD]
LCS-2			3			
9008L253-001	CLP	STANDARD CHLORINE	4	500 ml	250 ml	PH ≥ 12
-001R			5			
-001S			6			5 ml of 10PPM CN STD [ALD]
-003			7			
9008L257-001			8			
-002			9			
-003			10			
-004			11			
9008L251-002	STD	CE MALVERN	12			PH < 2 → 12
9008L253-002	CLP	STANDARD CHLORINE	13	500 ml	250 ml	PH ≥ 12

Prep by 08/06/90

ANALYST: P.M. Patel

DISTILLATION DATE: 08/06/90

REVIEWED BY: [signature]

DATE: 8/14/90

LOGBOOK #: 1825

RFW21-21-18/A-12/89

AR302297

F

DIGESTION LOG

WESTON

SAMPLE DIGESTION RECORD

Digestion Date 08/06/90 Digestion Batch No. 9060876 Analyst CMT
Completion Date 08/10/90 Type of Prep AA Method CLP
Parameters As, Se, Pb, Tl Client STANDARD CHLORINE
Type of Analysis See below Matrix WATER

RFW#	Customer ID/ spike info	Initial Wt/Vol g/mL	Final Vol (mL)	pH <2>	DESCRIPTION WATER-Color, Clarity SOIL-Color, Texture, Artifacts	Soil Prep Pan wt (g)	Wet wt (g)	Dry wt (g)
9008L253-								
001		100 ml	100 ml	<	Total taken from 1 bottle			
001R					" " "			
001S	1 ml AA matrix CMT 8/6/90				taken from ea. bottle			
003								
005					Soluble taken from 005 bottle			
005R					" " " "			
005S	1 ml AA matrix CMT 8/6/90				taken from 005 bottle			
9008L257-								
001		100 ml	100 ml	<	Total			
002								
003								
004								
005					Soluble			
006								
007								
009								
9060876-MB1					Total			
LC1	1 ml AA LCS							
LC2	CMT 8/6/90							

Comments:

AA087601 - wk! PRN) total
AA087602 - wk! PRN } soluble

AR302299

RFW 21-21-001/C-4/87

WESTON

SAMPLE DIGESTION RECORD

Digestion Date 08/06/90 Digestion Batch No. 90L0877 Analyst CHT
Completion Date 08/06/90 Type of Prep ICP Method CLP
Parameters HSL Client STANDARD CHLORINE
Type of Analysis See below Matrix WATER

RFW#	Customer ID/ spike info	Initial Wt/Vol g/mL	Final Vol (mL)	pH <2>	DESCRIPTION WATER-Color,Clarity SOIL-Color,Texture,Artifacts	Soil Prep Pan wt (g)	Wet wt (g)	(g)
9008L253-								
001		100 ml	100 ml	<	Total taken from 1 bottle			
001R					" " " "			
001S	]1ml ICP A,B, RFW 1A CHT 7/16/90				taken from 1 ms bottle			
003								
005					Soluble taken from 5 bottle			
005R					" " " "			
005S	]1ml ICP A,B RFW 1A CHT 7/16/90				taken from 5 ms bottle			
9008L257-								
001		100 ml	100 ml	<	Total			
002								
003								
004								
006					Soluble			
007								
008								
009								
90L0877-MB1					total			
LL1	]1ml ICV 1,2,3 4A, 4B.							
ICV	CHT 8/6/90							

Comments:

IC087701. WK1) total
[illegible] PRN

IC087702. WK1) soluble
. PRN
[illegible]

Custody Transfer Record/Lab Work Request

WESTON

WESTON Analytics Use Only

9008L253

Client: Standard Chlorine Delaware

Work Order: 2267 09 02 8/15/90

Date Rec'd.: 8-1-90 Date Due: 2 weeks

RFW Contact: Tom Drew x7302

Client Contact/Phone: ——

Refrigerator#									
#/Type Container	G	G/A	P	P	P	G/A			
Volume	2/40ml	[illegible]	1l	1l	1l	950ml			
Preservative	—	—	HNO3	HNO3	NAOH	—			
ANALYSES REQUESTED →	VOA	DNA **	HSL metal [illegible] Filter	HSL Metal Filter	CN	Pest PCB			

WA Use Only Lab ID	Client ID/Description	Matrix	Date Collected	VOA	DNA	HSL metal	HSL Metal Filter	CN	Pest/PCB			
001	GW4-0-1ORGA	W	8-1-90	✓	✓	✓	[illegible]	✓	✓			
~~002~~	~~GW4-0-2ORGA (DUP)~~	W	8-1-90	✓	✓	✓	[illegible]	✓	✓	Cancelled		
003	GW4-0-3ORGA (FB)	W	8-1-90	✓	✓	✓	[illegible]	✓	✓			
004	GW4-0-4ORGA (TB)	W	8-1-90	✓								
001	GW4-0-5ORGA (MS)	W	8-1-90	✓	[redacted]	✓	[illegible]	✓	✓			
001	GW4-0-5ORGA (MSD)	W	8-1-90	✓	✓	✓	[illegible]	✓	✓			
005	GW4-0-1ORGA MS/MSD	W	8-1-90				✓	✓ 15				
~~006~~	~~GW4-0-2ORGA~~	|	|				✓	Cancelled				
~~007~~	~~GW4-0-3ORGA~~	|	|				✓ 15					
~~008~~	~~GW4-0-4ORGA~~ 15	|	|									

full CLP

*Please run this Batch w/9008L257 2Week

**DNA = Special Compound List

Matrix: S - Soil, SE - Sediment, SO - Solid, W - Water, O - Oil, A - Air, WI - Wipe, DS - Drum Solids, DL - Drum Liquids, F - Fish, L - EP/TCLP Leachate, X - Other [redacted]

Special Instructions: see Sharon Nordstrom for special Instructions !!!

Item/Reason	Relinquished by	Received by	Date	Time	Item/Reason	Relinquished by	Received by	Date	Time
all	[illegible]	K Sheppard	8/1/90	5:20	Revision #1 8/2/90 Cancel				
VOA Hold	[illegible]	[illegible]	8/2/90	13:10	Sample # 002 per S.A.N. [illegible]				
DNA	[illegible]	[illegible]	8/3/90	9:00					
metals	[illegible]	[illegible]	8/6	9:20	CN	[illegible]	[illegible]	8/6	[illegible]
[illegible]	[illegible]	[illegible]	8/6	[illegible]	CN	[illegible]	[illegible]	8/6	20:00

WESTON Analytics Use Only

Samples Were:
1 Shipped or (Hand-Delivered)
NOTES:

2 Ambient or (Chilled)
NOTES:

3 Received Broken/Leaking (Improperly Sealed) Y (N)
NOTES:

4 Properly Preserved (Y) N
NOTES:

5 Received Within Holding Times (Y) N
NOTES:

COC Tape Was:
1 Present on Outer Package Y (N)
2 Unbroken on Outer Package Y (N)
3 Present on Sample Y (N)
4 Unbroken on Sample Y (N)
NOTES:

COC Record Was:
1 Present Upon Receipt of Samples (Y) N

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

RFW 21-21-001/A-2/88 7-115

Sample #GW4-0-1-ORGA and #GW4-0-5-ORGA are the same sample (MS/MSD) per S.A.N.