

CITY OF ELMIRA

**JANUARY 11, 2001
GROUNDWATER SAMPLING EVENT
MW-1, MW-2, AND MW-3**

**FOR THE
FORMER AMERICAN LAFRANCE SITE
100 LAFRANCE STREET
ELMIRA, NEW YORK**

MUNICIPAL ASSISTANCE BROWNFIELD PROGRAM

**NYSDEC
1996 CLEAN WATER / CLEAN AIR BOND ACT
ENVIRONMENTAL RESTORATION PROJECTS**

SUBMITTED TO:

**NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
AND
NYS DEPARTMENT OF HEALTH**



PREPARED BY:



FAGAN ENGINEERS
Environmental Consultants

113 East Chemung Place
Elmira N.Y. 14904
(607) 734-2165

**JANUARY 30, 2001
F.E. PROJECT NO. 97.150A**



FAGAN ENGINEERS • Environmental Consultants

113 East Chemung Place • Elmira, New York 14904 • (607) 734-2165 • Fax (607) 734-2169

January 30, 2001

Mr. Manmohan Mehta, P.E.
NYS Department of Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414

RE: JANUARY 11, 2001 MONITORING WELL SAMPLING
AMERICAN LAFRANCE BROWNFIELDS PROJECT
(ID #B00011-8)

Dear Mr. Mehta:

During the site investigation, development of the wells yielded groundwater with excessive turbidity. This may have contributed to elevated levels of metals detected in the groundwater samples.

At the request of NYSDEC, the January 11, 2001 sampling event of the three monitoring wells was performed subsequent to re-purging of the wells in an effort to obtain groundwater samples with a turbidity of less than 50 ntu, which was accomplished with this sampling event.

Enclosed herein are five copies of the January 11, 2001 groundwater sampling results and ASP Class B Deliverables for the American LaFrance Brownfields Site monitoring wells.

Please review the enclosed laboratory results in conjunction with the ALF reports and advise me as to the appropriate changes to be made to the reports, if any.

Sincerely,

FAGAN ENGINEERS

Stephen G. Degerdon, PWS
Project Manager

Enclosures

cc: Mr. Jeffery T. Lacey, Esq., Mackenzie, et. al.
Ms. Cheryl Schneider, City of Elmira

DER/HAZ. WASTE REMED
REGION 8
JAN 31 2001
RECEIVED

M:\Job Data Directory\1997\1997-150\MEHTA-01252001.doc

JANUARY 11, 2001 MONITORING WELL SAMPLING
AMERICAN LAFRANCE BROWNFIELDS PROJECT
(ID #B00011-8)

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
1.0	EXECUTIVE SUMMARY	1
APPENDICES		
APPENDIX A	LABORATORY RESULTS	
APPENDIX B	ASP CLASS B DELIVERABLES	

JANUARY 11, 2001 MONITORING WELL SAMPLING
AMERICAN LAFRANCE BROWNFIELDS PROJECT
(ID #B00011-8)

1. EXECUTIVE SUMMARY

During the site investigation, development of the wells yielded groundwater with excessive turbidity. This may have contributed to elevated levels of metals detected in the groundwater samples.

At the request of NYSDEC, the January 11, 2001 sampling event of the three monitoring wells was performed subsequent to re-purging of the wells in an effort to obtain groundwater samples with a turbidity of less than 50 ntu, which was accomplished with this sampling event.

On January 10, 2001, MW-1, MW-2, and MW-3 were purged with a 2.0-gpm pump. Pumping was performed until relatively little sediment was observed in the purge water.

On January 11, 2001, the wells were sampled between 11:30 am and 12:45 pm for TAL Metals utilizing a low flow pump collecting groundwater at a rate of 5.5-minutes per liter. One sample was collected from each well. A matrix spike and matrix spike duplicate were collected from MW-2. Samples were collected and labeled consistent with the Brownfields protocol. Mr. Mehta with NYSDEC obtained a sample for TAL Metals from MW-2. Measurements for depth of groundwater to top of well casing, pH, Turbidity, and Temperature are listed below:

<u>WELL</u>	<u>DEPTH TO GW</u>	<u>TURBIDITY</u>	<u>pH</u>	<u>TEMPERATURE</u>
MW-1	11.73-feet	14.9 ntu	8.21	10.3° C
MW-2	8.94-feet	14.1 ntu	7.20	7.1° C
MW-3	8.26-feet	37.0 ntu*	7.55	9.1° C

* Turbidity increased to 46.3 ntu during sampling. The Turbidity measured prior to NYSDEC sampling was 46.3 ntu.

<u>WELL</u>	<u>SAMPLE DESIGNATION</u>
MW-1	ALFMW101112001
MW-2	ALFMW201112001
MW-2	ALFMW2MS01112001 (matrix spike)
MW-2	ALFMW2MSD01112001 (matrix spike duplicate)
MW-3	ALFMW301112001

APPENDIX A
LABORATORY RESULTS



LOZIER LABORATORIES, INC.

909 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 654-6350
FAX (716) 654-6354

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: Fagan Engineers
113 E. Chemung Place
Elmira, NY 14904

Date Received: 1/16/01
Laboratory No.: 11545
Report Date: 1/18/01

Attn: Steve Degerdon
Client PO Number: 1997.150

SAMPLE INFORMATION

Sample Date: 1/11/01
Sampler: Client

Matrix: Aqueous

LABORATORY REPORT

Lozier Sample ID:	11545-1	11545-2			
ExpressLab Sample ID:	40195	40198			
Fagan Eng. Sample ID:	ACFMW 101112001	ACFMW 201112001			
PARAMETER			Units	Method Number	Analysis Date
Aluminum	0.105	0.071	mg/l	EPA 60108	1/17/01
Antimony	0.003	<0.003	mg/l	EPA 60108	1/17/01
Arsenic	<0.005	<0.005	mg/l	EPA 60108	1/17/01
Barium	0.160	0.220	mg/l	EPA 60108	1/17/01
Beryllium	<0.001	<0.001	mg/l	EPA 60108	1/17/01
Cadmium	<0.001	<0.001	mg/l	EPA 60108	1/17/01
Calcium	88.4	122	mg/l	EPA 60108	1/17/01
Chromium	<0.003	<0.003	mg/l	EPA 60108	1/17/01
Cobalt	<0.003	<0.003	mg/l	EPA 60108	1/17/01
Copper	0.084	0.064	mg/l	EPA 60108	1/17/01
Iron	0.093	0.503	mg/l	EPA 60108	1/17/01
Lead	0.011	0.004	mg/l	EPA 60108	1/17/01
Magnesium	17.0	22.4	mg/l	EPA 60108	1/17/01
Manganese	0.007	1.41	mg/l	EPA 60108	1/17/01
Mercury	<0.0002	<0.0002	mg/l	EPA 7470	1/17/01
Nickel	0.003	<0.003	mg/l	EPA 60108	1/17/01
Potassium	4.89	6.05	mg/l	EPA 60108	1/17/01
Selenium	<0.005	<0.005	mg/l	EPA 60108	1/17/01
Silver	<0.005	<0.005	mg/l	EPA 60108	1/17/01
Sodium	112	48.2	mg/l	EPA 60108	1/17/01
Thallium	<0.010	<0.010	mg/l	EPA 60108	1/17/01
Vanadium	<0.003	<0.003	mg/l	EPA 60108	1/17/01
Zinc	0.024	0.019	mg/l	EPA 60108	1/17/01

PAGE: 1

James A. Brown
James A. Brown



LOZIER LABORATORIES, INC.

909 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 654-6350
FAX (716) 654-6354

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10380

Client: Fagan Engineers
113 E. Chemung Place
Elmira, NY 14904

Date Received: 1/16/01
Laboratory No.: 11545
Report Date: 1/18/01

Attn: Steve Degerdon
Client PO Number: 1997.150

SAMPLE INFORMATION

Sample Date: 1/11/01
Sampler: Client

Matrix: Aqueous

LABORATORY REPORT

Lozier Sample ID: 11545-3
ExpressLab Sample ID: 40197
Fagan Eng. Sample ID: ACFMW 301112001

PARAMETER		Units	Method Number	Analysis Date
Aluminum	0.232	mg/l	EPA 60108	1/17/01
Antimony	0.003	mg/l	EPA 60108	1/17/01
Arsenic	<0.005	mg/l	EPA 60108	1/17/01
Barium	0.162	mg/l	EPA 60108	1/17/01
Beryllium	<0.001	mg/l	EPA 60108	1/17/01
Cadmium	0.001	mg/l	EPA 60108	1/17/01
Calcium	91.2	mg/l	EPA 60108	1/17/01
Chromium	<0.003	mg/l	EPA 60108	1/17/01
Cobalt	<0.003	mg/l	EPA 60108	1/17/01
Copper	0.552	mg/l	EPA 60108	1/17/01
Iron	3.50	mg/l	EPA 60108	1/17/01
Lead	0.035	mg/l	EPA 60108	1/17/01
Magnesium	18.4	mg/l	EPA 60108	1/17/01
Manganese	0.112	mg/l	EPA 60108	1/17/01
Mercury	<0.0002	mg/l	EPA 7470	1/17/01
Nickel	0.055	mg/l	EPA 60108	1/17/01
Potassium	3.90	mg/l	EPA 60108	1/17/01
Selenium	<0.005	mg/l	EPA 60108	1/17/01
Silver	<0.005	mg/l	EPA 60108	1/17/01
Sodium	64.1	mg/l	EPA 60108	1/17/01
Thallium	<0.010	mg/l	EPA 60108	1/17/01
Vanadium	<0.003	mg/l	EPA 60108	1/17/01
Zinc	0.133	mg/l	EPA 60108	1/17/01

PAGE: 2

James A. Grier

EXPRESSLAB

P.O. Box 40, 5611 Water Street, Middlesex, NY 14507

NY #11369 NJ #73744 CA #2055 SC #91011

Phone #: 800-843-5227

Fax #: 716-554-4114

"Specializing in Environmental Soil Tests"

Customer: Fagan Engineers

Address:

City/State/Zip:

Phone: () -

Fax: () -

Contact: Steve D.

WORKORDER

Date Due: 1 / 1

☐ Standard Service

☐ Rush Service

PO No.: 1997.150

Project No.:

Project Cust.:

Project Site:

Spill No.:

Pin No.:

Sample Demographics and Parameters for Analysis

Special Instructions:

ASP/CLP Protocol
Call B. deliverables
5 day turnaround as discussed.

Suspect Ingredient:

☐ Diesel

☐ Gasoline

☐ Oil

Parameters for Analysis

Metals

Date

Time

Sample Description & Location

MATRIX

Aqueous

Soil

Other

1.	1-11-01	1130	ALFMW10/112001	✓															
2.																			
3.	1-11-01	1205	ALFMW20/112001	✓															
4.																			
5.	1-11-01	1245	ALFMW30/112001	✓															
6.																			
7.	1-11-01	1205	ALFMW2M50/112001	✓															
8.																			
9.	1-11-01	1205	ALFMW2M50/112001	✓															
10.																			
11.																			

Chain of Custody Record

of Samples: 3

of Containers: 5

Sampler: S. Dogerdon

Signature: [Signature]

Samples Sent By: ☐ ExpressMail

☐ Hand Delivery

Custody Seal Intact?

☐ Yes

☐ No

☐ N/A

Shipment Complete?

☐ Yes

☐ No

☐ N/A

Temperature: _____

Fahrenheit

SAMPLES RELINQUISHED BY

SAMPLES RECEIVED BY

Name & Signature

Date & Time

Name & Signature

Date & Time

1.	<u>Dogerdon</u>	<u>1-12-01 8:00 AM</u>	1.	<u>Annabelle Curkendall</u>	<u>1-12-01 3:35 PM</u>
2.			2.		
3.					

Received for Laboratory By:

"Results when YOU want them!"

Lozier Analytical Group

Lozier Laboratories, Inc. #10390

EXPRESSLAB, Inc. #11369

888-841-5227

800-843-5227

F
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This Fax Came From:

☒ Lozier Laboratories, Inc.☐ EXPRESSLAB, Inc.Date: 1/26/01To: Steve D.Fax To: 607-734-2169From: James A. CousinsFax From: 716-554-4114

Subject: _____

Pages: 3 + Cover

Notes:

We didn't add the spikes to the MS/MSD sample, However, we did an MS/MD on one of the samples for the batch QC. The MS/MD were within the required range. I have included these results with this fax.

JAC

Lozier Laboratories Inc.
696 N. Winton Rd.
Rochester, NY 14609
888-841-5227
FAX 716-554-4114

Lozier Laboratories, Inc.
5611 Water Street
Middlesex, NY 14507
888-841-5227
FAX 716-554-4114

ExpressLab
5611 Water St.
Middlesex, NY 14507
800-843-5227
FAX 716-554-4114

Fagan Engineers
113 E. Chemung Place
Elmira, NY 14904

Case Narrative
CLP Inorganics

SDG: 011601

On 1/16/01, Lozier Laboratories, Inc. received 3 aqueous samples, an MS sample, and an MSD sample. These samples were received in good condition from ExpressLab, Inc. The samples were received at ExpressLab, Inc. on 1/16/01 from Fagan Engineers. The samples were sampled on 1/11/01. Analyses were performed in accordance with the NYSDEC ASP, (Revised 10/95).

The samples were analyzed for the TAL metals as follows:

Test	Method	Test	Method	Test	Method
Aluminum	EPA 6010B	Copper	EPA 6010B	Silver	EPA 6010B
Antimony	EPA 6010B	Iron	EPA 6010B	Sodium	EPA 6010B
Arsenic	EPA 6010B	Lead	EPA 6010B	Thallium	EPA 6010B
Barium	EPA 6010B	Magnesium	EPA 6010B	Vanadium	EPA 6010B
Beryllium	EPA 6010B	Manganese	EPA 6010B	Zinc	EPA 6010B
Cadmium	EPA 6010B	Mercury	EPA 7470		
Calcium	EPA 6010B	Nickel	EPA 6010B		
Chromium	EPA 6010B	Potassium	EPA 6010B		
Cobalt	EPA 6010B	Selenium	EPA 6010B		

The samples were digested for metals using EPA method 3010A on 1/17/01. The samples were analyzed for metals on 1/17/01 by EPA method 6010B using a Thermo Jarrell Ash 61E trace analyzer.

All of the quality control was within the acceptable limits, except for a few CCV's for arsenic and nickel which were slightly above the ten percent limit. These are acceptable, however, since the sample results for arsenic and nickel were low or undetected.

The samples were digested for mercury on 1/16/01 and analyzed by cold vapor on 1/17/01.

Sample ACFMW201112001 required analysis for MS/MSD as the batch QC. The spikes were not added for the MS/MSD, however, we did an MS/MD on ACFMW101112001 for the batch QC. The MS/MD were within the required limits.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. 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 his designee, as verified by the following signature."

Lozier Laboratories, Inc.

By:

James A. Cousins
James Cousins
Inorganics Metals Supervisor
Laboratory Director

Laboratory QC Summary - MS

CLIENT: Fagan Engineers

Sample Information			Matrix Spike				Spike
Analyte	Client Sample ID	Analysis Date	Sample Result *	Spiked Sample Result *	Spike Added *	% Recovery	Limit %
Aluminum	ACFMW101112001	1/17/01	0.105	3.16	3.00	101.8%	75-125%
Antimony	ACFMW101112001	1/17/01	0.003	0.697	0.750	92.5%	75-125%
Arsenic	ACFMW101112001	1/17/01	<0.005	2.91	3.00	97.0%	75-125%
Barium	ACFMW101112001	1/17/01	0.160	3.08	3.00	97.3%	75-125%
Beryllium	ACFMW101112001	1/17/01	<0.001	0.073	0.075	97.5%	75-125%
Cadmium	ACFMW101112001	1/17/01	0.001	0.076	0.075	101.6%	75-125%
Calcium	ACFMW101112001	1/17/01	88.4	128.4	40.0	100.0%	75-125%
Chromium	ACFMW101112001	1/17/01	<0.003	0.292	0.300	97.3%	75-125%
Cobalt	ACFMW101112001	1/17/01	<0.003	0.692	0.750	92.3%	75-125%
Copper	ACFMW101112001	1/17/01	0.084	0.458	0.400	93.5%	75-125%
Iron	ACFMW101112001	1/17/01	0.093	1.84	1.50	116.5%	75-125%
Lead	ACFMW101112001	1/17/01	0.011	0.738	0.750	96.9%	75-125%
Magnesium	ACFMW101112001	1/17/01	17.0	46.5	30.0	98.8%	75-125%
Manganese	ACFMW101112001	1/17/01	0.007	0.701	0.750	92.5%	75-125%
Mercury	ACFMW101112001	1/17/01	<0.0002	0.00095	0.0010	95.0%	75-125%
Nickel	ACFMW101112001	1/17/01	0.003	0.699	0.750	92.8%	75-125%
Potassium	ACFMW101112001	1/17/01	4.89	39.61	30.0	115.7%	75-125%
Selenium	ACFMW101112001	1/17/01	<0.005	2.29	2.00	114.5%	75-125%
Silver	ACFMW101112001	1/17/01	<0.005	0.038	0.050	78.0%	75-125%
Sodium	ACFMW101112001	1/17/01	112	171.5	50.0	119.0%	75-125%
Thallium	ACFMW101112001	1/17/01	<0.010	2.65	3.00	88.3%	75-125%
Vanadium	ACFMW101112001	1/17/01	<0.003	0.774	0.750	103.2%	75-125%
Zinc	ACFMW101112001	1/17/01	0.024	0.662	0.750	85.1	75-125%

* mg/l

JHN-26-2001 15:36

LUZIER ANALYTICAL GROUP

710 504 5304

P.03/04

Laboratory QC Summary - Duplicate

CLIENT: Fagan Engineers

Sample Information			Duplicate Results			
Analyte	Client Sample ID	Analysis Date	Original Sample Result (mg/l)	Duplicate Result (mg/l)	Relative Percent Difference (RPD)	Acceptable Limits
Aluminum	ACFMW101112001	1/17/01	0.105	0.117	5.4%	0-20%
Antimony	ACFMW101112001	1/17/01	0.003	<0.003	0.0%	0-20%
Arsenic	ACFMW101112001	1/17/01	<0.005	<0.005	0.0%	0-20%
Barium	ACFMW101112001	1/17/01	0.160	0.168	2.4%	0-20%
Beryllium	ACFMW101112001	1/17/01	<0.001	<0.001	0.0%	0-20%
Cadmium	ACFMW101112001	1/17/01	<0.001	<0.001	0.0%	0-20%
Calcium	ACFMW101112001	1/17/01	88.4	90.7	1.3%	0-20%
Chromium	ACFMW101112001	1/17/01	<0.003	<0.003	0.0%	0-20%
Cobalt	ACFMW101112001	1/17/01	<0.003	<0.003	0.0%	0-20%
Copper	ACFMW101112001	1/17/01	0.084	0.057	19.1%	0-20%
Iron	ACFMW101112001	1/17/01	0.093	0.118	11.8%	0-20%
Lead	ACFMW101112001	1/17/01	0.011	0.0052	35.8% **	0-20%
Magnesium	ACFMW101112001	1/17/01	17.0	17.9	2.5%	0-20%
Manganese	ACFMW101112001	1/17/01	0.007	0.0064	4.5%	0-20%
Mercury	ACFMW101112001	1/17/01	<0.0002	<0.0002	0.0%	0-20%
Nickel	ACFMW101112001	1/17/01	0.003	<0.003	0.0%	0-20%
Potassium	ACFMW101112001	1/17/01	4.89	5.24	3.5%	0-20%
Selenium	ACFMW101112001	1/17/01	<0.005	<0.005	0.0%	0-20%
Silver	ACFMW101112001	1/17/01	<0.005	<0.005	0.0%	0-20%
Sodium	ACFMW101112001	1/17/01	112	115	1.5%	0-20%
Thallium	ACFMW101112001	1/17/01	<0.010	<0.010	0.0%	0-20%
Vanadium	ACFMW101112001	1/17/01	<0.003	<0.003	0.0%	0-20%
Zinc	ACFMW101112001	1/17/01	0.024	0.017	17.4%	0-20%

** Acceptable. The results are low level.

APPENDIX B

ASP CLASS B DELIVERABLES

ASP Inorganics Data Package

SDG: 011601

**Prepared for: Fagan Engineers
113 E. Chemung Place
Elmira, NY 14904**

**Prepared by: Lozier Laboratories, Inc.
5611 Water St.
Middlesex, NY 14507**

INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

Laboratory Name: <u>Lozier Laboratories, Inc.</u>	Case No.: _____
City/State: <u>Middlesex, NY</u>	SAS No.: _____
ASP Date: <u>1/16/01</u> SDG No.: <u>011601</u>	Contract No.: _____

	Page Numbers		Check	
	From:	To:	Lab	NYSDEC
1. Inventory Sheet (FORM DC-2)(Do not number)	NA	NA	_____	_____
1a. Case Narrative	1	NA	_____	_____
2. Cover Page (FORM IN)	2	NA	_____	_____
3. Inorganic Analysis Data Sheet (FORM I-IN)	3	5	_____	_____
4. Initial and Continuing Calibration Verification (FORM IIA-IN)	6	7	_____	_____
5. CRDL Standards for AA and ICP (FORM IIB-IN)	8	NA	_____	_____
6. Blanks (FORM III-IN)	9	NA	_____	_____
7. ICP Interference Check Sample (FORM IV-IN)	10	NA	_____	_____
8. Spike Sample Recovery (FORM VA-IN)	11	NA	_____	_____
9. Post Spike Sample Recovery (FORM VB-IN)	12	NA	_____	_____
10. Duplicates (FORM VI-IN)	13	NA	_____	_____
11. Laboratory Control Sample (FORM VII-IN)	14	NA	_____	_____
12. Standard Addition Results (FORM VIII-IN)	NA	NA	_____	_____
13. ICP Serial Dilutions (FORM IX-IN)	15	NA	_____	_____
14. Instrument Detection Limits (FORM X-IN)	16	17	_____	_____
15. ICP Interelement Correction Factors (FORM XIA-IN)	18	NA	_____	_____
16. ICP Interelement Correction Factors (FORM XIB-IN)	NA	NA	_____	_____
17. ICP Linear Ranges (FORM XII-IN)	19	NA	_____	_____
18. Preparation Log (FORM XIII-IN)	20	21	_____	_____
19. Analysis Run Log (FORM XIV-IN)	22	23	_____	_____
20. ICP Raw Data	24	99	_____	_____
21. Furnace AA RAW Data	NA	NA	_____	_____
22. Mercury Raw Data	100	101	_____	_____

INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

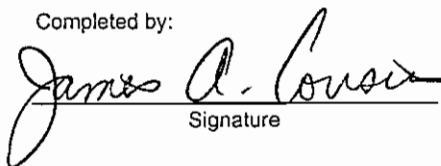
SDG No.: 011601

Case No.: _____

SAS No.: _____

	Page Numbers		Check	
	From:	To:	Lab	NYSDEC
23. Cyanide Raw Data	NA	NA		
24. Preparation Logs Raw Data	102	103		
25. Percent Solids Determination Log	NA	NA		
26. Contract Lab Sample Information Sheet (CLSIS)	NA	NA		
27. NYSDEC Shipping/Receiving Documents	NA	NA		
Airbill (No. of Shipments _____)	NA	NA		
Chain-of-custody Records	104	NA		
Sample Tags	NA	NA		
Sample Log-in Sheet (Lab and DC1)	NA	NA		
SDG Cover Sheet	NA	NA		
28. Misc. Shipping/Receiving Records				
_____	NA	NA		
_____	NA	NA		
29. Internal Lab Sample Transfer Records and Transfer Sheets				
From ExpressLabs to Lozier Laboratory	105	NA		
_____	NA	NA		
30. Internal Original Sample Prep and Analysis				
Prep Records _____	NA	NA		
Analysis Records _____	NA	NA		
Description _____	NA	NA		
31. Other Records				
Metals Soil Calculation Sheets	106	107		
_____	NA	NA		
_____	NA	NA		
32. Comments:				

Completed by:


Signature

James A. Cousins / Laboratory Director
Print Name and Title

1/22/01
Date

Audited by:

Signature

Print Name and Title

Date

Fagan Engineers
113 E. Chemung Place
Elmira, NY 14904

Case Narrative
CLP Inorganics

SDG: 011601

On 1/16/01, Lozier Laboratories, Inc. received 3 aqueous samples, an MS sample, and an MSD sample. These samples were received in good condition from ExpressLab, Inc. The samples were received at ExpressLab, Inc. on 1/16/01 from Fagan Engineers. The samples were sampled on 1/11/01. Analyses were performed in accordance with the NYSDEC ASP, (Revised 10/95).

The samples were analyzed for the TAL metals as follows:

Test	Method	Test	Method	Test	Method
Aluminum	EPA 6010B	Copper	EPA 6010B	Silver	EPA 6010B
Antimony	EPA 6010B	Iron	EPA 6010B	Sodium	EPA 6010B
Arsenic	EPA 6010B	Lead	EPA 6010B	Thallium	EPA 6010B
Barium	EPA 6010B	Magnesium	EPA 6010B	Vanadium	EPA 6010B
Beryllium	EPA 6010B	Manganese	EPA 6010B	Zinc	EPA 6010B
Cadmium	EPA 6010B	Mercury	EPA 7470		
Calcium	EPA 6010B	Nickel	EPA 6010B		
Chromium	EPA 6010B	Potassium	EPA 6010B		
Cobalt	EPA 6010B	Selenium	EPA 6010B		

The samples were digested for metals using EPA method 3010A on 1/17/01. The samples were analyzed for metals on 1/17/01 by EPA method 6010B using a Thermo Jarrell Ash 61E trace analyzer.

All of the quality control was within the acceptable limits, except for a few CCV's for arsenic and nickel which were slightly above the ten percent limit. These are acceptable, however, since the sample results for arsenic and nickel were low or undetected.

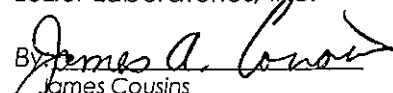
The samples were digested for mercury on 1/16/01 and analyzed by cold vapor on 1/17/01.

Sample ACFMW201112001 required analysis for MS/MSD as the batch QC. The spikes were not added for the MS/MSD, however, we did an MS/MD on ACFMW101112001 for the batch QC. The MS/MD were within the required limits.

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. 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 his designee, as verified by the following signature."

Lozier Laboratories, Inc.

By


James Cousins
Inorganics Metals Supervisor
Laboratory Director

0001

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: LOZIER_LABORATORIES_INC.____

Contract: _____

Lab Code: 10390_

Case No.: _____

SAS No.: _____

SDG No.: 011601

SOW No.: ILM04.0

EPA Sample No.

ACFMW 10112001ACFMW 20112001ACFMW 20112001

Lab Sample ID

11545-111545-211545-3

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:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. 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.

Signature:

James A. Cousins
1/22/01

Name:

James A. Cousins

Date:

Title:

Laboratory Director

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: LOZIER LABORATORIES INC.

Contract: _____

ACFMW 10/11/2001

Lab Code: 10390

Case No.: _____

SAS No.: _____

SDG No.: 011601

Matrix (soil/water): WaterLab Sample ID: 11545-1Level (low/med): LOWDate Received: 1/16/01

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	105			P
7440-36-0	Antimony	3.0			P
7440-38-2	Arsenic	5.0	u		P
7440-39-3	Barium	160			P
7440-41-7	Beryllium	1.0	u		P
7440-43-9	Cadmium	1.0	u		P
7440-70-2	Calcium	88400			P
7440-47-3	Chromium	3.0	u		P
7440-48-4	Cobalt	3.0	u		P
7440-50-8	Copper	84.0			P
7439-89-6	Iron	93.0			P
7439-92-1	Lead	11.0			P
7439-95-4	Magnesium	17000			P
7439-96-5	Manganese	7.0			P
7439-97-6	Mercury	0.2	u		CV
7440-02-0	Nickel	3.0			P
7440-09-7	Potassium	4890			P
7782-49-2	Selenium	5.0	u		P
7440-22-4	Silver	5.0	u		P
7440-23-5	Sodium	112000			P
7440-28-0	Thallium	10.0	u		P
7440-62-2	Vanadium	3.0	u		P
7440-66-6	Zinc	24.0			P
	Cyanide				
7440-42-8	Boron				
7440-31-5	Tin				

Color Before: ColorlessClarity Before: Colorless

Texture: _____

Color After: ClearClarity After: Clear

Artifacts: _____

Comments: _____

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: LOZIER LABORATORIES INC.

Contract: _____

ACFMW 20112001

Lab Code: 10390 Case No.: _____

SAS No.: _____

SDG No.: 011601

Matrix (soil/water): WaterLab Sample ID: 11545-2Level (low/med): LOWDate Received: 1/16/01

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	71.0			P
7440-36-0	Antimony	3.0	u		P
7440-38-2	Arsenic	5.0	u		P
7440-39-3	Barium	220			P
7440-41-7	Beryllium	1.0	u		P
7440-43-9	Cadmium	1.0	u		P
7440-70-2	Calcium	122000			P
7440-47-3	Chromium	3.0	u		P
7440-48-4	Cobalt	3.0	u		P
7440-50-8	Copper	64.0			P
7439-89-6	Iron	503			P
7439-92-1	Lead	4.0			P
7439-95-4	Magnesium	22400	-		P
7439-96-5	Manganese	1410			P
7439-97-6	Mercury	0.2	u		CV
7440-02-0	Nickel	3.0	u		P
7440-09-7	Potassium	6050			P
7782-49-2	Selenium	5.0	u		P
7440-22-4	Silver	5.0	u		P
7440-23-5	Sodium	48200			P
7440-28-0	Thallium	10.0	u		P
7440-62-2	Vanadium	3.0	u		P
7440-66-6	Zinc	19.0			P
	Cyanide				
7440-42-8	Boron				
7440-31-5	Tin				

Color Before: ColorlessClarity Before: Colorless

Texture: _____

Color After: clearClarity After: Clear

Artifacts: _____

Comments:

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: LOZIER LABORATORIES INC.

Contract: _____

ACFMW 30112001

Lab Code: 10390

Case No.: _____

SAS No.: _____

SDG No.: 011601

Matrix (soil/water): WaterLab Sample ID: 11545-3Level (low/med): LOWDate Received: 1/16/01

% Solids: _____

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	232			P
7440-36-0	Antimony	3.0			P
7440-38-2	Arsenic	5.0	u		P
7440-39-3	Barium	162			P
7440-41-7	Beryllium	1.0	u		P
7440-43-9	Cadmium	1.0			P
7440-70-2	Calcium	91200			P
7440-47-3	Chromium	3.0	u		P
7440-48-4	Cobalt	3.0	u		P
7440-50-8	Copper	552			P
7439-89-6	Iron	3500			P
7439-92-1	Lead	35.0			P
7439-95-4	Magnesium	18400			P
7439-96-5	Manganese	112			P
7439-97-6	Mercury	0.2	u		CV
7440-02-0	Nickel	55.0			P
7440-09-7	Potassium	3900			P
7782-49-2	Selenium	5.0	u		P
7440-22-4	Silver	5.0	u		P
7440-23-5	Sodium	64100			P
7440-28-0	Thallium	10.0	u		P
7440-62-2	Vanadium	3.0	u		P
7440-66-6	Zinc	133			P
	Cyanide				
7440-42-8	Boron				
7440-31-5	Tin				

Color Before: ColorlessClarity Before: Colorless

Texture: _____

Color After: ClearClarity After: Clear

Artifacts: _____

Comments: _____

0006

Contract:.

SDG No.: 0-1/60/

Continuing Calibration Source: ULTRA/CPI

[illegible]

Contract:

Case No.:

SAS No. :

ICP CRDL Standard Source: *CT*

[illegible]

ILM04.0

0008

3
BLANKS

Lab Name: LOZIER LABORATORIES INC.

Contract: _____

Lab Code: 10390

Case No.: _____

SAS No.: _____

SDG No.: 011601

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)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Aluminum	50.0	u	50.0	u	50.0	u	50.0	u	50.0	u	P
Antimony	3.0	u	3.0	u	3.0	u	4.2	B	3.0	u	P
Arsenic	5.0	u	5.0	u	5.0	u	5.0	u	5.0	u	P
Barium	2.0	u	2.0	u	2.0	u	2.0	u	2.0	u	P
Beryllium	1.0	u	1.0	u	1.0	u	1.0	u	1.0	u	P
Cadmium	1.0	u	1.0	u	1.0	u	1.0	u	1.0	u	P
Calcium	100.0	u	100.0	u	100.0	u	100.0	u	283	B	P
Cromium	3.0	u	3.0	u	3.0	u	3.0	u	3.0	u	P
Cobalt	3.0	u	3.0	u	3.0	u	3.0	u	3.0	u	P
Copper	5.0	u	5.0	u	5.0	u	5.0	u	5.0	u	P
Iron	20.0	u	20.0	u	20.0	u	20.0	u	20.0	u	P
Lead	3.0	u	3.0	u	3.0	u	3.0	u	3.0	u	P
Magnesium	100.0	u	100.0	u	100.0	u	100.0	u	100.0	u	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	CV
Nickel	3.0	u	3.0	u	3.0	u	3.0	u	3.0	u	P
Potassium	300.0	u	300.0	u	300.0	u	300.0	u	300.0	u	P
Selenium	5.0	u	5.0	u	5.0	u	5.0	u	5.0	u	P
Silver	5.0	u	5.0	u	5.0	u	5.0	u	5.0	u	P
Sodium	700.0	u	700.0	u	700.0	u	700.0	u	700.0	u	P
Thallium	10.0	u	10.0	u	10.0	u	10.0	u	10.0	u	P
Vanadium	3.0	u	3.0	u	3.0	u	3.0	u	3.0	u	P
Zinc	3.0	u	3.0	u	3.0	u	3.0	u	3.0	u	P
Cyanide											
Boron											
Chlorine											

ICP INTERFERENCE CHECK SAMPLE

b Name: LOZIER LABORATORIES INC.

Contract: _____

Lab Code: 10390 Case No.: _____

SAS No.: _____

SDG No.: 011601

ICP ID Number: TRACE _____

ICS Source: CLF

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Aluminum	250000	25000	240700	247900	99.2	249500	246500	98.6
Antimony		500	-0.1	473	94.6	-0.7	476	95.2
Arsenic		500	-1.8	560	112.0	-8.5	558	111.6
Barium		250	0.5	273	109.2	0.5	265	106.0
Beryllium		250	0.1	251	100.4	0.0	251	100.4
Cadmium		500	13.3	508	101.6	1.1	508	101.6
Calcium	250000	250000	242000	247500	99.0	248100	246300	98.5
Chromium		250	4.6	240	96.0	4.5	243	97.2
Cobalt		250	1.1	251	100.4	0.9	253	101.2
Copper		250	1.3	276	110.4	3.1	273	109.2
Iron	100000	100000	99370	100700	100.7	102300	100300	100.3
Lead		500	2.4	536	107.2	2.9	529	105.8
Magnesium	250000	250000	262200	268100	107.2	271600	268900	107.6
Manganese		250	1.1	251	100.4	1.2	253	101.2
Mercury								
Nickel		500	0.5	491	98.2	0.3	498	99.6
Potassium								
Selenium		1000	-3.2	985	98.5	-3.9	985	98.5
Silver		500	0.7	480	96.0	0.9	487	97.4
Sodium								
Thallium		500	9.4	482	96.4	1.0	493	91.3
Vanadium		250	1.0	254	101.6	0.8	252	100.8
Zinc		500	-2.5	455	91.0	-3.1	461	92.2
Boron								
Tin								

b Name: LOZIER LABORATORIES INC.

Contract:

ACFMW/01112001

Lab Code: 10390

Case No.:

SAS No.:

SDG No.: 011601

Matrix (soil/water): Water

Level (low/med): LOW

% Solids for Sample: _____

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

[illegible]

Comments:

POST DIGEST SPIKE SAMPLE RECOVERY

b Name: LOZIER LABORATORIES INC.

Contract:

ACFMW10112001

Lab Code: 10390

Case No.:

SAS No.:

SDG No.: 01/601

Matrix (soil/water): Water

Level (low/med): LOW

Concentration Units: ug/L

[illegible]

Comments:

6
DUPLICATES

EPA SAMPLE NO.

ACFMW10112001

b Name: LOZIER LABORATORIES INC.

Contract: _____

Lab Code: 10390

Case No.: _____

SAS No.: _____

SDG No.: 011601

Matrix (soil/water): Water

Level (low/med): LOW

% Solids for Sample: _____

% Solids for Duplicate: _____

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum	0-20	105		117		5.4		P
Antimony	0-20	3.0		3.0	u	0.0		P
Arsenic	0-20	5.0	u	5.0	u	0.0		P
Barium	0-20	160		168		2.4		P
Beryllium	0-20	1.0	u	1.0	u	0.0		P
Cadmium	0-20	1.0	u	1.0	u	0.0		P
Calcium	0-20	88400		90670		1.3		P
Chromium	0-20	3.0	u	3.0	u	0.0		P
Cobalt	0-20	3.0	u	3.0	u	0.0		P
Copper	0-20	84.0		57.1		19.1		P
Iron	0-20	93.0		118		11.8		P
Lead	0-20	11.0		5.2		35.8		P
Magnesium	0-20	17000		17860		2.5		P
Manganese	0-20	7.0		6.4		4.5		P
Mercury	0-20	0.2	u	0.2	u	0.0		CV
Nickel	0-20	3.0		3.0	u	0.0		P
Potassium	0-20	4890		5240		3.5		P
Selenium	0-20	5.0	u	5.0	u	0.0		P
Silver	0-20	5.0	u	5.0	u	0.0		P
Sodium	0-20	112000		115400		1.5		P
Thallium	0-20	10.0	u	10.0	u	0.0		P
Vanadium	0-20	3.0	u	3.0	u	0.0		P
Zinc	0-20	24.0		16.9		17.4		P
Cyanide								
Boron								
Tin								

.b Name: LOZIER LABORATORIES INC. _____

Contract: _____

ACFMW 10/11/2001

Lab Code: 10390_ Case No.: _____

SAS No. : _____

SDG No.: 011601

Matrix (soil/water): water

Level (low/med): LOW

Concentration Units: ug/L

[illegible]

INSTRUMENT DETECTION LIMITS (QUARTERLY)

b Name: LOZIER LABORATORIES INC.

Contract: _____

Lab Code: 10390_ Case No.: _____

SAS No.: _____

SDG No.: 01/601

ICP ID Number: _____

Date 12/14/00

Flame AA ID Number: B400

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic			10		
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron			100		
Lead			3		
Magnesium			5000		
Manganese			15		
Mercury			0.2	0.2	
Nickel			40		
Potassium			5000		
Selenium			5		
Silver			10		
Sodium			5000		
Thallium			10		
Vanadium			50		
Zinc			20		
Cyanide			10		
Boron			10		
Tin			20		

Comments:

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: LOZIER LABORATORIES INC.

Contract: _____

Lab Code: 10390_ Case No.: _____

SAS No.: _____

SDG No.: 011601

ICP ID Number: TRACE_____

Date 12/15/00

Furnace AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	50.0	P
Antimony	206.84		60	3.0	P
Arsenic	189.04		10	5.0	P
Barium	493.41		200	2.0	P
Beryllium	313.04		5	1.0	P
Cadmium	226.50		5	1.0	P
Calcium	317.93		5000	100.0	P
Chromium	267.72		10	3.0	P
Cobalt	228.62		50	3.0	P
Copper	324.75		25	5.0	P
Iron	271.44		100	20.0	P
Lead	220.35		3	3.0	P
Magnesium	279.08		5000	100.0	P
Manganese	257.61		15	2.0	P
Mercury			0.2		NR
Nickel	231.60		40	3.0	P
Potassium	766.49		5000	300.0	P
Selenium	196.03		5	5.0	P
Silver	328.07		10	5.0	P
Sodium	330.23		5000	700.0	P
Thallium	190.86		10	10.0	P
Vanadium	292.40		50	3.0	P
Zinc	206.20		20	3.0	P
Cyanide			10		NR
Boron	249.68		10	10.0	P
Tin	189.98		20	10.0	P

Comments:

THESE ARE THE METHOD DETECTION LIMITS FOR THE TRACE USING DIGESTION METHOD
EPA_3010A AND ANALYSIS METHOD EPA_6010B.

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

b Name: LOZIER LABORATORIES, INC.

Contract: _____

Lab Code: 10390 Case No.: _____

SAS No.: _____

SDG No.: 011601

ICP ID Number: TRACE _____

Date: 12/6/00

Analyte	Wave-length (nm)	Interelement Correction Factors for :				
		Al	Ca	Fe	Mg	CR
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0079210
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0006315	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.23	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.98	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

ICP LINEAR RANGES (QUARTERLY)

Lab Name: LOZIER LABORATORIES INC.

Contract: _____

Lab Code: 10390 Case No.: _____

SAS No.: _____

SDG No.: 01/60/

ICP ID Number: TRACE _____

Date: 12/13/00

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	15.00	500000	P
Antimony	15.00	100000	P
Arsenic	15.00	50000	P
Barium	15.00	20000	P
Beryllium	15.00	5000	P
Cadmium	15.00	10000	P
Calcium	15.00	300000	P
Chromium	15.00	20000	P
Cobalt	15.00	100000	P
Copper	15.00	100000	P
Iron	15.00	500000	P
Lead	15.00	100000	P
Magnesium	15.00	300000	P
Manganese	15.00	10000	P
Mercury			NR
Nickel	15.00	20000	P
Potassium	15.00	200000	P
Selenium	15.00	20000	P
Silver	15.00	2000	P
Sodium	15.00	250000	P
Thallium	15.00	20000	P
Vanadium	15.00	50000	P
Zinc	15.00	10000	P

Comments:

THE LINEAR RANGE FOR TIN IS 10 UG/L.

THE LINEAR RANGE FOR BORON IS 10 UG/L.

13
PREPARATION LOG

Contract: _____

SAS No. : _____

Method:

FORM XIII - IN

0020 ILM04.0

13
PREPARATION LOG

Contract:

SDG No.: 011601

Method: CV

[illegible]

14
ANALYSIS RUN LOG

b Name: LOZIER LABORATORIES INC.

Contract: _____

Lab Code: 10390

Case No.: _____

SAS No.: _____

SDG. No.: 01601

Instrument ID Number: _____

TRACEMethod: P

Start Date: 1/17/01

End Date: 1/17/01

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	A L	T L	V N	Z N	C N	B N	S N
50		1539		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S		1547		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S		1555		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S		1603		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S		1607		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV		1612		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB		1619		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI		1627		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA		1635		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA B		1643		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV		1651		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB		1659		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PBW		1707		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LC5W1		1715		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LC5W2		1723		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZ		1731		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACFMW101112001		1739		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACFMW101112001A		1747		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACFMW101112001L		1755		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACFMW101112001P		1803		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACFMW101112001S		1811		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACFMW201112001		1819		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV		1827		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB		1835		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ACFMW301112001		1843		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZ		1851		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZ		1859		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI		1907		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA		1915		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA B		1923		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV		1931		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB		1939		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

14
ANALYSIS RUN LOG

Contract:

Case No.:

SAS No.:

SDG. No. : 011601

B 400

Method: *CV*

Start Date: 1/17/01

End Date: 1/17/01

FORM XIV - IN

0023

ILM04.0

61E Trace Run Logbook

Page 1 of 1

Analyst: JAC/GGS
 Date: 1/17/01
 Data File: 117011

Eppendorfs Used: M_EP_1
 M_EP_3
 M_EP_5
 M_EP_6

Job #	Lab Sample ID	Digestion or Sample #	Dil. Factor	Comments	Job #	Lab Sample ID	Digestion or Sample #	Dil. Factor	Comments
		Cal. Blank					CCB		
		Std 1					11541.3		Exp (TCLP)
		Std 2					11542.1		Exp (TCLP)
		Std 3					CRI		
		Std 4					ICSA		
		ICV					ICSAB		
		ICB					CCV		
		CRI					CCB		
		ICSA							
		ICSAB							
		CCV							
		CCB							
	Blk	12350							
	LCSW1	12351							
	LCSW2	12352							
	Blk Spk	12353							
	11545.1	12354							
	A	+spk							
	L	12354	1:4						
	D	12355							
	S	12356							
	11545.2	12357		Exp					
		CCV							
		CCB							
	11545.3	12358							
	11545.4	12359							
	11545.5	12360							
		CRI							
		ICSA							
		ICSAB							
		CCV							
		CCB							
	11548	12361		Frank Scopetti					
	11552	12362		David Merscher					
	11553	12363		Labelon					
	11558	12364		Markin Tubing					
	11559	12365		Markin Tubing					
		Justin Water							
	Justin	12366	1:10	(Paint)					
		12366	1:100						
		11541.1		Exp (TCLP)					
		11541.2		Exp (TCLP)					
		CCV							

Standard Solutions Used:

A
 B
 C
 D
 E

SRM Solutions Used:

F
 G
 H
 I
 J

0024

#	Element	STD BLK	STD1	STD2	STD3	STD4	ICV
1	Al3082	.07484	.23994	1.74503	8.41646	16.0929	2.508
2	Sb2068	-.0535	.06012	.89538	4.39099	8.44788	.2423
3	As1890	-.05781	.00931	.84756	4.54813	8.6629	.2725
4	Ba4934	.00523	.32623	3.30931	16.0958	30.6108	.2584
5	Be3130	.00418	.18926	1.9595	9.59279	17.7133	.2624
6	Cd2265	-.00419	.34342	3.55668	17.3572	32.6056	.2568
7	Ca3179	.05415	.33118	3.00828	14.2648	27.2047	12.68
8	Cr2677	-.00028	.00983	.09035	.44332	.8278	.2478
9	Co2286	-.00558	.06812	.74722	3.68429	6.92016	.2544
10	Cu3247	.12779	.21116	.98964	4.27626	8.06776	.2562
11	Fe2714	-.01587	.03117	.48037	2.43228	4.48072	2.577
12	Mg2790	0	.35448	3.61305	17.67	33.7701	12.54
13	Mn2576	.00054	.07438	.74501	3.75673	6.77562	.2568
14	Ni2316	-.00484	.12448	1.31494	6.411	11.9768	.2527
15	2203/1	-.02479	.18223	2.29186	11.4252	21.225	.2573
16	2203/2	.04213	.23678	2.15981	10.6418	20.3083	.2583
17	K_7664	.04059	1.34768	13.0312	66.972	135.956	11.88
18	Ag3280	-.01263	.16613	1.57022	7.65624	14.5266	.2406
19	Na3302	-.00877	.08632	.94205	4.93351	10.1016	24.17
20	1960/1	-.03479	.06224	1.31539	6.43006	12.8324	.2594
21	1960/2	.02063	.08819	.58235	2.68654	5.09542	.2367
22	Tl1908	-.02015	.01204	.21752	1.20589	2.31733	.2358
23	V_2924	.00028	.01448	.14302	.68926	1.34691	.2536
24	Zn2062	.00083	.01668	.15039	.71113	1.32762	.2445
25	B_2496	.00187	.11255	1.04428	5.12992	9.92404	.2398
26	Si2881	.25077	.45717	2.17181	9.81971	19.0714	2.456
27	Ga4172	.00055	0	.00028	-.00028	-.00025	Q.0550
28	Sn1899	0	0	0	0	0	Q.0001
29	Mo2020	.0181	.52418	5.35017	26.1764	49.6966	.2570
30	Sr4215	-.0028	2.02561	20.77	99.823	189.737	.2563
31	Ti3349	0	0	0	0	0	Q.0005
32	*Y	1800.25	1828.85	1765.55	1760.55	1885	1780.3
33	Pb2203						.2580
34	Se1960						.2443

#	Element	ICB	CRI	ICSA	ICSAB	CCV	CCB
1	Al3082	.0049	.2325	240.7	247.9	5.150	.0243
2	Sb2068	.0028	.1244	-.0001	.4734	.4860	.0030
3	As1890	.0046	.0196	-.0018	.5596	Q.5520	-.0033
4	Ba4934	.0001	.0224	.0005	.2727	.5200	.0004
5	Be3130	.0001	.0111	.0001	.2508	.5131	.0001
6	Cd2265	.0002	.0116	.0133	.5084	.5107	.0003
7	Ca3179	-.0023	.2174	242.0	247.5	25.28	.0316
8	Cr2677	.0003	.0230	.0046	.2402	.5098	.0006
9	Co2286	.0007	.1049	.0011	.2507	.5112	.0007
10	Cu3247	-.0009	.0545	.0013	.2758	.5136	-.0006
11	Fe2714	.0057	.1138	99.37	100.7	5.123	.0051
12	Mg2790	.0070	.2138	262.2	268.1	25.79	.0435
13	Mn2576	.0003	.0329	.0011	.2513	.5228	.0004
14	Ni2316	.0005	.0854	.0005	.4914	Q.6090	.0001
15	2203/1	.0000	.0091	.0467	.5683	.5175	.0011

#	Element	ICB	CRI	ICSA	ICSAB	CCV	CCB
16	2203/2	-.0021	.0056	-.0197	.5201	.5290	-.0010
17	K_7664	.0094	.5145	.0223	.0246	26.07	.0136
18	Ag3280	.0006	.0200	.0007	.4800	.4783	.0007
19	Na3302	.0846	.7110	.0643	-.0013	50.08	.1140
20	1960/1	.0030	.0113	-.0076	1.110	.5596	.0040
21	1960/2	.0010	.0063	-.0438	.9227	.4784	.0002
22	Tl1908	.0049	.0236	.0940	.5471	.4823	.0081
23	V_2924	.0003	.1071	.0010	.2538	.5261	.0004
24	Zn2062	.0001	.0425	-.0025	.4554	.4930	-.0002
25	B_2496	.0003	.0730	.0032	.4968	.4916	.0006
26	Si2881	-.0076	.4954	.0373	1.996	5.052	-.0023
27	Ga4172	.0192	-.0019	.0181	.0749	Q.0366	.0366
28	Sn1899	.0001	.0001	.0001	.0001	Q.0001	.0001
29	Mo2020	.0005	.0218	-.0018	.5049	.5143	-.0001
30	Sr4215	.0001	.0114	-.0159	.5178	.5117	.0003
31	Ti3349	.0005	.0005	.0005	.0005	Q.0005	.0005
32	*Y	1943	1723.45	1784.2	1730.75	1788.65	1933
33	Pb2203	-.0014	.0068	.0024	.5362	.5252	-.0003
34	Se1960	.0017	.0079	-.0317	.9852	.5055	.0015
#	Element	12350	12351	12352	12353	11545.1	11545.1A
1	Al3082	.0421	5.744	.0496	2.668	.1051	2.159
2	Sb2068	.0007	.4315	.0042	.6165	.0031	.1851
3	As1890	-.0033	.4882	-.0004	2.601	.0023	.2071
4	Ba4934	.0019	.6353	.0014	2.633	.1603	.3729
5	Be3130	-.0000	.5104	.0001	.0678	-.0001	.1941
6	Cd2265	.0005	.4862	.0007	.0706	.0004	.2101
7	Ca3179	.2825	.8472	24.75	25.44	88.42	94.06
8	Cr2677	.0016	.4661	.0006	.2687	.0009	.2005
9	Co2286	-.0011	.4673	-.0008	.6339	-.0002	.2072
10	Cu3247	.0702	.5784	.0574	.4095	.0843	.2910
11	Fe2714	.5827	8.374	.0127	1.594	.0930	2.157
12	Mg2790	.0523	.5349	24.35	24.02	16.97	24.98
13	Mn2576	.0022	.4929	.0065	.6433	.0069	.2031
14	Ni2316	.0010	.4839	.0010	.6365	.0034	.1969
15	2203/1	.0139	.4909	.0096	.6648	.0157	.2130
16	2203/2	.0042	.5015	.0016	.6802	.0091	.2101
17	K_7664	.1211	.1297	23.53	24.36	4.886	15.03
18	Ag3280	.0009	.5326	.0015	.0676	.0009	.2435
19	Na3302	.4354	.4088	25.06	23.89	111.5	120.5
20	1960/1	-.0054	.4285	-.0064	2.304	-.0048	.1900
21	1960/2	.0058	.3669	.0086	1.942	.0063	.1634
22	Tl1908	-.0010	.4255	-.0013	2.345	-.0017	.1881
23	V_2924	.0006	.4923	.0002	.7101	.0004	.2172
24	Zn2062	.0278	.4716	.0179	.6207	.0238	.2146
25	B_2496	.0225	.5545	.0294	1.015	.0981	.2853
26	Si2881	.1755	.9886	.2517	3.758	3.791	5.649
27	Ga4172	-.0013	.0366	.0731	.0540	.0356	.0546
28	Sn1899	.0001	.0001	.0001	.0001	.0001	.0001
29	Mo2020	.0013	.4972	.0010	1.412	.0018	.2098
30	Sr4215	.0016	.6506	-.0016	1.408	.1365	.3491
31	Ti3349	.0005	.0005	.0005	.0005	.0005	.0005

#	Element	12350	12351	12352	12353	11545.1	11545.1A
32	*Y	1751.9	1800.9	1821.05	1873.7	1803.75	1815.35
33	Pb2203	.0074	.4979	.0043	.6751	.0113	.2111
34	Se1960	.0021	.3875	.0036	2.063	.0026	.1723

#	Element	11545.1L	11545.1D	11545.1S	11545.2	CCV	CCB
1	Al3082	.0328	.1165	3.159	.0707	4.809	-.0016
2	Sb2068	.0016	.0021	.6969	.0027	.4658	.0025
3	As1890	.0009	.0025	2.905	-.0023	.5286	-.0032
4	Ba4934	.0383	.1683	3.084	.2198	.4941	.0003
5	Be3130	-.0000	-.0000	.0731	.0000	.4851	-.0000
6	Cd2265	.0003	.0004	.0762	.0004	.4938	.0003
7	Ca3179	21.96	90.67	128.4	121.5	23.79	-.0014
8	Cr2677	.0003	.0009	.2920	.0006	.4986	.0003
9	Co2286	.0003	.0001	.6917	-.0003	.4884	.0007
10	Cu3247	.0175	.0571	.4575	.0640	.4779	-.0022
11	Fe2714	.0250	.1180	1.838	.5034	5.052	.0037
12	Mg2790	4.330	17.86	46.65	22.40	24.27	.0119
13	Mn2576	.0017	.0064	.7013	1.410	.5054	.0002
14	Ni2316	.0002	.0020	.6987	.0013	Q.5867	-.0001
15	2203/1	.0050	.0082	.7342	.0072	.5051	.0009
16	2203/2	.0004	.0037	.7406	.0027	.5184	-.0014
17	K_7664	1.106	5.235	39.61	6.052	24.94	.0212
3	Ag3280	.0100	.0007	.0380	.0009	.4677	.0008
19	Na3302	24.68	115.4	171.5	48.18	48.87	.0873
20	1960/1	.0011	-.0070	2.573	-.0056	.5344	.0000
21	1960/2	.0046	.0031	2.141	.0051	.4678	-.0003
22	Tl1908	.0030	-.0011	2.651	.0023	.4672	.0043
23	V_2924	.0002	.0004	.7738	.0006	.4993	-.0000
24	Zn2062	.0058	.0169	.6617	.0191	.4680	-.0000
25	B_2496	.0254	.0768	1.200	.1300	.4718	.0002
26	Si2881	.9445	3.985	10.90	5.408	4.740	-.0042
27	Ga4172	.0191	.0548	.0552	.0366	Q.0545	.0190
28	Sn1899	.0001	.0001	.0001	.0001	Q.0001	.0001
29	Mo2020	.0004	.0010	1.550	.0019	.4988	.0003
30	Sr4215	.0329	.1441	1.711	.2994	.4980	.0002
31	Ti3349	.0005	.0005	.0005	.0005	Q.0005	.0005
32	*Y	1879.5	1784.15	1757.85	1775.2	1884.15	1934.3
33	Pb2203	.0019	.0052	.7384	.0042	.5139	-.0007
34	Se1960	.0034	-.0003	2.285	.0015	.4900	-.0002

#	Element	11545.3	11545.4	11545.5	CRI	ICSA	ICSAB
1	Al3082	.2319	.0555	.0597	.2278	249.5	246.5
2	Sb2068	.0032	.0005	.0003	.1132	-.0007	.4759
3	As1890	-.0001	.0015	-.0006	.0245	-.0085	.5577
4	Ba4934	.1620	.2597	.2749	.0214	.0005	.2653
5	Be3130	.0001	.0001	.0001	.0108	.0000	.2506
6	Cd2265	.0011	.0006	.0004	.0109	.0154	.5078
7	Ca3179	91.18	139.8	149.4	.2404	248.1	246.3
8	Cr2677	.0013	.0013	.0010	.0222	.0045	.2425
9	Co2286	-.0009	-.0009	-.0006	.1022	.0009	.2530

#	Element	11545.3	11545.4	11545.5	CRI	ICSA	ICSAB
10	Cu3247	.5521	.0565	.0917	.0536	.0031	.2731
11	Fe2714	3.499	1.046	.6086	.1179	102.3	100.3
12	Mg2790	18.36	26.43	28.22	.2152	271.6	268.9
13	Mn2576	.1115	1.678	1.796	.0318	.0012	.2532
14	Ni2316	.0545	.0014	.0021	.0854	.0003	.4982
15	2203/1	.0387	.0095	.0116	.0075	.0514	.5702
16	2203/2	.0324	.0027	.0056	.0033	-.0213	.5084
17	K_7664	3.898	7.358	7.873	.4833	.0320	.0250
18	Ag3280	.0009	.0008	.0009	.0191	.0009	.4869
19	Na3302	64.12	57.73	61.91	.5466	.1707	.0758
20	1960/1	-.0021	-.0045	-.0039	.0082	-.0130	1.129
21	1960/2	.0061	.0016	.0096	.0065	-.0530	.9125
22	Tl1908	-.0010	-.0037	-.0007	.0167	.1038	.5479
23	V_2924	.0002	.0000	-.0002	.1061	.0008	.2517
24	Zn2062	.1326	.0185	.0222	.0413	-.0031	.4612
25	B_2496	.0808	.1441	.1664	.0723	.0034	.4992
26	Si2881	4.730	6.249	6.671	.4761	.0398	2.010
27	Ga4172	.0366	.0553	.0366	-.0005	.0366	.0743
28	Sn1899	.0001	.0001	.0001	.0001	.0001	.0001
29	Mo2020	.0032	.0021	.0021	.0221	-.0032	.5075
30	Sr4215	.1561	.3543	.3746	.0107	-.0160	.5071
31	Ti3349	.0005	.0005	.0005	.0005	.0005	.0005
32	*Y	1722.1	1742.45	1688.95	1786.55	1722.25	1759.45
33	Pb2203	.0345	.0050	.0076	.0047	.0029	.5290
1	Se1960	.0034	-.0004	.0051	.0071	-.0396	.9847

#	Element	CCV	CCB	11548	11552	11553	11558
1	Al3082	5.169	.0083	.0483	.0668	.0563	.1962
2	Sb2068	.5042	.0042	.0020	.0005	.0016	.0035
3	As1890	Q.5558	-.0008	-.0032	-.0009	.0013	.0002
4	Ba4934	.5122	.0002	.8711	.0030	.0033	.0243
5	Be3130	.5286	.0000	-.0000	-.0001	.0001	.0000
6	Cd2265	.5165	.0003	.0004	.0003	.0005	.0008
7	Ca3179	25.92	.0058	68.38	.2772	.3550	125.7
8	Cr2677	.5483	.0006	.0000	.0009	.0009	.0019
9	Co2286	.5071	.0007	-.0008	-.0009	-.0007	-.0005
10	Cu3247	.5312	-.0016	.0869	.1370	.1566	.0724
11	Fe2714	5.301	.0072	.1173	.0545	.1960	.2839
12	Mg2790	25.55	.0144	17.94	.0714	.0700	7.645
13	Mn2576	.5326	.0002	.1492	.0022	.0667	.0278
14	Ni2316	Q.6022	.0007	.0015	.0011	.0047	.0029
15	2203/1	.5182	.0013	.0097	.0098	.0155	.0164
16	2203/2	.5319	-.0018	.0039	.0077	.0074	.0107
17	K_7664	25.88	.0108	2.774	5.496	H817.4	3.716
18	Ag3280	.4900	.0007	.0009	.0009	.0058	.0013
19	Na3302	51.63	.1343	13.48	H575.0	2.724	H365.8
20	1960/1	.5589	.0042	-.0087	-.0042	-.0052	-.0008
1	1960/2	.4732	.0040	.0054	.0073	.0000	.0054
2	Tl1908	.4811	.0016	-.0036	-.0012	-.0009	-.0078
23	V_2924	.5227	.0003	.0002	.0002	.0015	.0014
24	Zn2062	.4931	.0001	.0620	.0283	.0320	.1078
25	B_2496	.4830	.0005	.1697	1.319	.0449	.2025

#	Element	CCV	CCB	11548	11552	11553	11558
26	Si2881	5.078	-.0079	7.284	3.597	.2421	.9426
27	Ga4172	Q.0545	.0199	.0366	.0183	.0753	.0178
28	Sn1899	Q.0001	.0001	.0001	.0001	.0001	.0001
29	Mo2020	.5134	.0008	.0007	.0010	.0066	.0167
30	Sr4215	.5213	.0001	1.309	.0092	.0017	.0990
31	Ti3349	Q.0005	.0005	.0005	.0005	.0005	.0005
32	*Y	1831.7	1970.5	1810.75	1773.65	1717.75	1754.25
33	Pb2203	.5273	-.0008	.0058	.0084	.0101	.0126
34	Se1960	.5017	.0041	.0007	.0034	-.0017	.0033

#	Element	11559	JUSTIN	123':10)	123'100)	11541.1	11541.2
1	Al3082	.1293	.0155	1.063	.1279	1.014	1.902
2	Sb2068	.0024	.0113	.0070	.0036	.0128	.0074
3	As1890	-.0026	.0009	.0074	-.0001	.0121	.0004
4	Ba4934	.0205	.0798	.6893	.1205	.6631	.6453
5	Be3130	.0000	-.0001	-.0001	-.0001	-.0001	.0009
6	Cd2265	.0004	.0009	.0844	.0106	.0040	.0061
7	Ca3179	H304.0	49.69	29.77	3.761	H392.3	118.8
8	Cr2677	.0009	.0006	.0505	.0069	.0019	.0030
9	Co2286	.0008	.0025	.1169	.0147	.0131	.0231
10	Cu3247	.1278	.0065	.0079	-.0003	.0029	.0026
11	Fe2714	.0579	.4437	.0911	.0100	25.83	28.05
12	Mg2790	12.81	13.46	.8292	.1009	53.17	29.47
13	Mn2576	.2023	.0957	.0346	.0044	5.496	H19.27
14	Ni2316	.0038	.0101	.0032	-.0007	.0089	.0208
15	2203/1	.0142	.0028	39.75	4.904	.0733	.0284
16	2203/2	.0075	.0013	41.21	5.123	.0843	.0246
17	K_7664	7.073	1.175	.1655	.0216	10.63	4.249
18	Ag3280	.0015	.0004	.0020	.0006	.0008	.0024
19	Na3302	H704.6	77.78	2.698	.4219	H936.5	H843.7
20	1960/1	-.0038	.0437	.0018	.0007	.0542	.0271
21	1960/2	.0072	.0303	.0069	.0008	.0175	.0149
22	Tl1908	.0024	L-.0204	.0054	.0037	.0074	.0135
23	V_2924	-.0002	-.0004	.0013	.0004	.0019	.0027
24	Zn2062	.0351	.4600	H49.02	6.634	.1806	.1059
25	B_2496	.4375	.6520	.0228	.0034	.0997	.0246
26	Si2881	.8780	4.913	.0658	.0025	4.086	6.610
27	Ga4172	.0558	.0366	.0021	.0192	.0366	.0730
28	Sn1899	.0001	.0001	.0001	.0001	.0001	.0001
29	Mo2020	.0440	.0003	.0011	-.0004	.0013	-.0021
30	Sr4215	.1974	.1950	.0802	.0103	1.448	1.006
31	Ti3349	.0005	.0005	.0005	.0005	.0005	.0005
32	*Y	1713.95	1897.15	1920.95	1929.7	1702.5	1821.4
33	Pb2203	.0097	.0018	40.73	5.050	.0806	.0259
34	Se1960	.0035	.0347	.0052	.0008	.0298	.0190

Method: NEW Standard: STD BLK
 F Time: 01/17/01 15:24:03

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Avge	.0748	-.0535	-.0578	.0052	.0042	-.0042	.0542
SDev	.0123	.0161	.0292	.0034	.0021	.0028	.0000
%RSD	16.40	30.13	50.47	65.24	49.12	67.73	.0592
#1	.0835	-.0649	-.0785	.0028	.0056	-.0062	.0542
#2	.0662	-.0421	-.0372	.0077	.0027	-.0022	.0541
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Avge	-.0003	-.0056	.1278	-.0159	-.0000	.0005	-.0048
SDev	.0004	.0025	.0029	.0039	.0008	.0008	.0107
%RSD	141.4	44.45	2.235	24.50	8949.	141.4	221.3
#1	-.0006	-.0073	.1298	-.0186	-.0006	.0000	-.0124
#2	.0000	-.0038	.1258	-.0131	.0005	.0011	.0027
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Avge	-.0248	.0421	.0406	-.0126	-.0088	-.0348	.0206
SDev	.0320	.0426	.0957	.0125	.0147	.0314	.0420
%RSD	128.9	101.0	235.8	98.59	167.9	90.30	203.3
#1	-.0474	.0722	-.0271	-.0214	-.0192	-.0570	-.0090
#2	-.0022	.0120	.1083	-.0038	.0016	-.0126	.0503
Elem	Tl1908	V_2924	Zn2062	B_2496	Si2881	Ga4172	Sn1899
Avge	-.0202	.0003	.0008	.0019	.2508	.0006	.0000
SDev	.0138	.0004	.0004	.0066	.0019	.0000	.0000
%RSD	68.51	141.4	49.12	354.8	.7410	2.235	.0000
#1	-.0299	.0006	.0011	-.0028	.2495	.0006	.0000
#2	-.0104	.0000	.0005	.0066	.2521	.0005	.0000
Elem	Mo2020	Sr4215	Ti3349				
Avge	.0181	-.0028	.0000				
SDev	.0047	.0024	.0000				
%RSD	26.10	86.27	.0000				
#1	.0214	-.0045	.0000				
#2	.0148	-.0011	.0000				

0030

Std	1	2	3	4	5	6	7
Code	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1800	--	--	--	--	--	--
SDev	40.23439	--	--	--	--	--	--
%RSD	2.234934	--	--	--	--	--	--
#1	1772	--	--	--	--	--	--
#2	1829	--	--	--	--	--	--

0031

Method: NEW Standard: STD1
 F Time: 01/17/01 15:32:02

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Avge	.2399	.0601	.0093	.3262	.1893	.3434	.3312
SDev	.0129	.0190	.0018	.0052	.0058	.0029	.0076
%RSD	5.396	31.59	19.25	1.590	3.065	.8549	2.306

#1	.2491	.0736	.0106	.3299	.1934	.3455	.3366
#2	.2308	.0467	.0081	.3226	.1852	.3413	.3258

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Avge	.0098	.0681	.2112	.0312	.3545	.0744	.1245
SDev	.0005	.0037	.0079	.0008	.0125	.0020	.0068
%RSD	5.206	5.494	3.755	2.656	3.529	2.656	5.452

#1	.0095	.0708	.2168	.0318	.3633	.0758	.1293
#2	.0102	.0655	.2056	.0306	.3456	.0730	.1197

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Avge	.1822	.2368	1.348	.1661	.0863	.0622	.0882
SDev	.1119	.0426	.012	.0064	.0054	.0273	.0081
%RSD	61.42	18.01	.9013	3.860	6.302	43.93	9.180

#1	.1031	.2669	1.339	.1616	.0825	.0429	.0825
#2	.2614	.2066	1.356	.1707	.0902	.0816	.0939

Elem	Tl1908	V_2924	Zn2062	B_2496	Si2881	Ga4172	Sn1899
Avge	.0120	.0145	.0167	.1126	.4572	.0000	.0000
SDev	.0011	.0000	.0008	.0063	.0044	.0000	.0000
%RSD	9.077	.0121	4.973	5.588	.9648	.0000	.0000

#1	.0128	.0145	.0173	.1081	.4603	.0000	.0000
#2	.0113	.0145	.0161	.1170	.4541	.0000	.0000

Elem	Mo2020	Sr4215	Ti3349
Avge	.5242	2.026	.0000
SDev	.0557	.064	.0000
%RSD	10.62	3.152	.0000

#1	.4848	2.071	.0000
#2	.5635	1.980	.0000

0032

Std	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avg	1829	--	--	--	--	--	--
SD	48.57829	--	--	--	--	--	--
%RSD	2.656220	--	--	--	--	--	--
#1	1794	--	--	--	--	--	--
#2	1863	--	--	--	--	--	--

0033

Method: NEW Standard: STD2

Time: 01/17/01 15:40:02

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Avge	1.745	.8954	.8476	3.309	1.960	3.557	3.008
SDev	.027	.0513	.0053	.046	.036	.031	.046
%RSD	1.534	5.725	.6261	1.394	1.837	.8649	1.546
#1	1.764	.9316	.8438	3.342	1.985	3.578	3.041
#2	1.726	.8591	.8513	3.277	1.934	3.535	2.975
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Avge	.0904	.7472	.9896	.4804	3.613	.7450	1.315
SDev	.0013	.0156	.0162	.0074	.062	.0220	.036
%RSD	1.435	2.093	1.636	1.545	1.723	2.954	2.731
#1	.0913	.7583	1.001	.4856	3.657	.7606	1.340
#2	.0894	.7362	.9782	.4751	3.569	.7295	1.290
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Avge	2.292	2.160	13.03	1.570	.9421	1.315	.5824
SDev	.025	.106	.14	.018	.0145	.054	.0109
%RSD	1.075	4.901	1.061	1.164	1.538	4.101	1.878
#1	2.309	2.235	13.13	1.583	.9523	1.354	.5901
#2	2.274	2.085	12.93	1.557	.9318	1.277	.5746
Elem	Tl1908	V_2924	Zn2062	B_2496	Si2881	Ga4172	Sn1899
Avge	.2175	.1430	.1504	1.044	2.172	.0003	.0000
SDev	.0033	.0015	.0016	.014	.027	.0004	.0000
%RSD	1.510	1.038	1.079	1.380	1.251	141.4	.0000
#1	.2198	.1441	.1515	1.054	2.191	.0006	.0000
#2	.2152	.1420	.1492	1.034	2.153	.0000	.0000
Elem	Mo2020	Sr4215	Ti3349				
Avge	5.350	20.77	.0000				
SDev	.060	.27	.0000				
%RSD	1.130	1.304	.0000				
#1	5.393	20.96	.0000				
#2	5.307	20.58	.0000				

	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1766	--	--	--	--	--	--
SDDev	33.16333	--	--	--	--	--	--
%RSD	1.878357	--	--	--	--	--	--
#1	1742	--	--	--	--	--	--
#2	1789	--	--	--	--	--	--

Method: NEW Standard: STD3

Time: 01/17/01 15:48:01

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Avge	8.416	4.391	4.548	16.10	9.593	17.36	14.26
SDev	.036	.025	.077	.14	.034	.05	.13
%RSD	.4255	.5723	1.685	.8893	.3546	.2790	.8969
#1	8.391	4.373	4.494	15.99	9.569	17.32	14.17
#2	8.442	4.409	4.602	16.20	9.617	17.39	14.36
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Avge	.4433	3.684	4.276	2.432	17.67	3.757	6.411
SDev	.0038	.037	.030	.056	.17	.028	.038
%RSD	.8524	1.016	.6916	2.307	.9407	.7438	.5893
#1	.4460	3.711	4.255	2.393	17.79	3.776	6.438
#2	.4406	3.658	4.297	2.472	17.55	3.737	6.384
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Avge	11.43	10.64	66.97	7.656	4.934	6.430	2.687
SDev	.05	.17	.21	.071	.069	.016	.105
%RSD	.3992	1.571	.3073	.9339	1.392	.2556	3.898
#1	11.39	10.52	66.83	7.606	4.885	6.442	2.612
#2	11.46	10.76	67.12	7.707	4.982	6.418	2.761
Elem	Tl1908	V_2924	Zn2062	B_2496	Si2881	Ga4172	Sn1899
Avge	1.206	.6893	.7111	5.130	9.820	-.0003	.0000
SDev	.014	.0070	.0057	.005	.035	.0004	.0000
%RSD	1.125	1.015	.8043	.0896	.3580	141.4	.0000
#1	1.196	.6942	.7152	5.133	9.795	.0000	.0000
#2	1.215	.6843	.7071	5.127	9.845	-.0006	.0000
Elem	Mo2020	Sr4215	Ti3349				
Avge	26.18	99.82	.0000				
SDev	.32	1.36	.0000				
%RSD	1.221	1.358	.0000				
#1	25.95	98.86	.0000				
#2	26.40	100.8	.0000				

0036

tStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1761	--	--	--	--	--	--
SDev	5.727548	--	--	--	--	--	--
%RSD	.3253272	--	--	--	--	--	--
#1	1765	--	--	--	--	--	--
#2	1756	--	--	--	--	--	--

0037

Method: NEW Standard: STD4

Time: 01/17/01 15:56:01

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Avge	16.09	8.448	8.663	30.61	17.71	32.61	27.20
SDev	.89	.439	.386	1.02	1.01	1.44	1.52
%RSD	5.527	5.191	4.451	3.341	5.690	4.410	5.603

#1	16.72	8.758	8.936	31.33	18.43	33.62	28.28
#2	15.46	8.138	8.390	29.89	17.00	31.59	26.13

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Avge	.8278	6.920	8.068	4.481	33.77	6.776	11.98
SDev	.0476	.424	.468	.230	2.01	.395	.67
%RSD	5.749	6.124	5.796	5.127	5.954	5.830	5.559

#1	.8615	7.220	8.398	4.643	35.19	7.055	12.45
#2	.7942	6.621	7.737	4.318	32.35	6.496	11.51

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Avge	21.22	20.31	136.0	14.53	10.10	12.83	5.095
SDev	.86	.65	6.5	.65	.42	.60	.470
%RSD	4.042	3.215	4.816	4.491	4.206	4.682	9.230

#1	21.83	20.77	140.6	14.99	10.40	13.26	5.428
#2	20.62	19.85	131.3	14.07	9.801	12.41	4.763

Elem	Tl1908	V_2924	Zn2062	B_2496	Si2881	Ga4172	Sn1899
Avge	2.317	1.347	1.328	9.924	19.07	-.0003	.0000
SDev	.092	.087	.080	.548	1.25	.0004	.0000
%RSD	3.978	6.473	6.037	5.523	6.571	141.4	.0000

#1	2.383	1.409	1.384	10.31	19.96	.0000	.0000
#2	2.252	1.285	1.271	9.536	18.19	-.0005	.0000

Elem	Mo2020	Sr4215	Ti3349
Avge	49.70	189.7	.0000
SDev	2.36	5.8	.0000
%RSD	4.743	3.081	.0000

#1	51.36	193.9	.0000
#2	48.03	185.6	.0000

	tStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--	--
Avge	1885	--	--	--	--	--	--	--
Dev	101.5405	--	--	--	--	--	--	--
%RSD	5.386764	--	--	--	--	--	--	--
#1	1813	--	--	--	--	--	--	--
#2	1957	--	--	--	--	--	--	--

0039

Method: NEW

Slope = Conc(SIR)/IR

Element	Wavelength	High std	Low std	Slope	Y-intercept	Date Standardized
Al3082	308.215	Multiple	Standards	.606873	-.045427	01/17/01 03:56:01
Sb2068	206.838	Multiple	Standards	.104650	.005581	01/17/01 03:56:01
As1890	189.042	Multiple	Standards	.118629	.006878	01/17/01 03:56:01
Ba4934	493.409	Multiple	Standards	.031269	-.000164	01/17/01 03:56:01
Be3130	313.042	Multiple	Standards	.053370	-.000223	01/17/01 03:56:01
Cd2265	226.502	Multiple	Standards	.029049	.000121	01/17/01 03:56:01
Ca3179	317.933	Multiple	Standards	1.77274	-.095945	01/17/01 03:56:01
Cr2677	267.716	Multiple	Standards	1.10124	.000300	01/17/01 03:56:01
Co2286	228.616	Multiple	Standards	.136971	.000763	01/17/01 03:56:01
Cu3247	324.754	Multiple	Standards	.120510	-.015401	01/17/01 03:56:01
Fe2714	271.441	Multiple	Standards	2.09851	.033321	01/17/01 03:56:01
Mg2790	279.078	Multiple	Standards	1.42160	-.000039	01/17/01 03:56:01
Mn2576	257.610	Multiple	Standards	.137386	-.000077	01/17/01 03:56:01
Ni2316	231.604	Multiple	Standards	.078522	.000378	01/17/01 03:56:01
2203/1	220.351	Multiple	Standards	.045438	.001132	01/17/01 03:56:01
2203/2	220.352	Multiple	Standards	.048711	-.002048	01/17/01 03:56:01
K_7664	766.490	Multiple	Standards	.377061	-.015227	01/17/01 03:56:01
Ag3280	328.068	Multiple	Standards	.062931	.000783	01/17/01 03:56:01
Na3302	330.232	Multiple	Standards	10.2523	.090225	01/17/01 03:56:01
1960/1	196.021	Multiple	Standards	.081584	.002858	01/17/01 03:56:01
1960/2	196.022	Multiple	Standards	.175684	-.003644	01/17/01 03:56:01
Tl1908	190.864	Multiple	Standards	.385385	.007743	01/17/01 03:56:01
V_2924	292.402	Multiple	Standards	.717812	-.000205	01/17/01 03:56:01
2062	206.200	Multiple	Standards	.686518	-.000584	01/17/01 03:56:01
2203	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
Se1960	196.026	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
B_2496	249.678	Multiple	Standards	.096007	-.000186	01/17/01 03:56:01
Si2881	288.150	Multiple	Standards	.514166	-.129000	01/17/01 03:56:01
Ga4172	417.206	Multiple	Standards	-66.3295	.036599	01/17/01 03:56:01
Sn1899	189.980	Multiple	Standards	4822.58	.000108	01/17/01 03:56:01
Mo2020	202.030	Multiple	Standards	.019424	-.000350	01/17/01 03:56:01
Sr4215	421.550	Multiple	Standards	.005000	.000012	01/17/01 03:56:01
Ti3349	334.940	Multiple	Standards	54771.4	.000517	01/17/01 03:56:01

0040

Method: NEW

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al3082	308.215	STD BLK	.000000	-.000003	.000003
		STD1	.100000	.100186	-.000186
		STD2	1.00000	1.01359	-.013587
		STD3	5.00000	5.06230	-.062296
		STD4	10.0000	9.72093	.279069

CorCoef: 0.99979

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb2068	206.838	STD BLK	.000000	-.000018	.000018
		STD1	.010000	.011873	-.001873
		STD2	.100000	.099283	.000717
		STD3	.500000	.465099	.034901
		STD4	1.00000	.889652	.110348

CorCoef: 0.99974

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As1890	189.042	STD BLK	.000000	.000019	-.000019
		STD1	.010000	.007984	.002016
		STD2	.100000	.107424	-.007424
		STD3	.500000	.546421	-.046421
		STD4	1.00000	1.03455	-.034554

CorCoef: 0.99960

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As4934	493.409	STD BLK	.000000	-.000001	.000001
		STD1	.010000	.010036	-.000036
		STD2	.100000	.103313	-.003313
		STD3	.500000	.503127	-.003127
		STD4	1.00000	.956991	.043009

CorCoef: 0.99968

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe3130	313.042	STD BLK	.000000	.000001	-.000001
		STD1	.010000	.009878	.000122
		STD2	.100000	.104355	-.004355
		STD3	.500000	.511741	-.011741
		STD4	1.00000	.945133	.054867

CorCoef: 0.99917

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr2265	226.502	STD BLK	.000000	-.000001	.000001
		STD1	.010000	.010097	-.000097
		STD2	.100000	.103439	-.003439
		STD3	.500000	.504328	-.004328
		STD4	1.00000	.947278	.052722

CorCoef: 0.99949

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca3179	317.933	STD BLK	.000000	.000066	-.000066
		STD1	.500000	.491158	.008842
		STD2	5.00000	5.23696	-.236958
		STD3	25.0000	25.1918	-.191822
		STD4	50.0000	48.1310	1.86903

CorCoef: 0.99973

0041

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr2677	267.716	STD BLK	.000000	-.000011	.000011
		STD1	.010000	.011131	-.001131
		STD2	.100000	.099799	.000201
		STD3	.500000	.488504	.011496
		STD4	1.00000	.911916	.088084

CorCoef: 0.99940

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co2286	228.616	STD BLK	.000000	-.000001	.000001
		STD1	.010000	.010095	-.000095
		STD2	.100000	.103111	-.003111
		STD3	.500000	.505404	-.005404
		STD4	1.00000	.948623	.051377

CorCoef: 0.99948

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu3247	324.754	STD BLK	.000000	-.000001	.000001
		STD1	.010000	.010047	-.000047
		STD2	.100000	.103861	-.003861
		STD3	.500000	.499933	.000067
		STD4	1.00000	.956847	.043153

CorCoef: 0.99975

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe714	271.441	STD BLK	.000000	.000008	-.000008
		STD1	.100000	.098749	.001251
		STD2	1.00000	1.04139	-.041391
		STD3	5.00000	5.13750	-.137503
		STD4	10.0000	9.43618	.563825

CorCoef: 0.99905

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg2790	279.078	STD BLK	.000000	-.000051	.000051
		STD1	.500000	.503901	-.003901
		STD2	5.00000	5.13629	-.136288
		STD3	25.0000	25.1197	-.119745
		STD4	50.0000	48.0075	1.99245

CorCoef: 0.99974

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn2576	257.610	STD BLK	.000000	-.000002	.000002
		STD1	.010000	.010143	-.000143
		STD2	.100000	.102278	-.002278
		STD3	.500000	.516045	-.016045
		STD4	1.00000	.930798	.069202

CorCoef: 0.99859

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni2316	231.604	STD BLK	.000000	-.000002	.000002
		STD1	.010000	.010153	-.000153
		STD2	.100000	.103630	-.003630
		STD3	.500000	.503783	-.003783
		STD4	1.00000	.940821	.059179

CorCoef: 0.99939

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
203/1	220.351	STD BLK	.000000	.000005	-.000005
		STD1	.010000	.009412	.000588
		STD2	.100000	.105269	-.005269
		STD3	.500000	.520265	-.020265
		STD4	1.00000	.965541	.034459

CorCoef: 0.99927

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2203/2	220.352	STD BLK	.000000	.000005	-.000005
		STD1	.010000	.009486	.000514
		STD2	.100000	.103158	-.003158
		STD3	.500000	.516322	-.016322
		STD4	1.00000	.987181	.012819

CorCoef: 0.99974

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
7664	766.490	STD BLK	.000000	.000079	-.000079
		STD1	.500000	.492931	.007069
		STD2	5.00000	4.89835	.101652
		STD3	25.0000	25.2373	-.237335
		STD4	50.0000	51.2487	-1.24870

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
280	328.068	STD BLK	.000000	-.000012	.000012
		STD1	.010000	.011238	-.001238
		STD2	.100000	.099599	.000401
		STD3	.500000	.482601	.017399
		STD4	1.00000	.914960	.085040

CorCoef: 0.99964

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na3302	330.232	STD BLK	.000000	.000267	-.000267
		STD1	1.00000	.975211	.024789
		STD2	10.0000	9.74841	.251593
		STD3	50.0000	50.6700	-.669975
		STD4	100.000	103.655	-3.65493

CorCoef: 0.99993

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/1	196.021	STD BLK	.000000	.000019	-.000019
		STD1	.010000	.007936	.002064
		STD2	.100000	.110173	-.010173
		STD3	.500000	.527449	-.027449
		STD4	1.00000	1.04977	-.049774

CorCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/2	196.022	STD BLK	.000000	-.000018	.000018
		STD1	.010000	.011851	-.001851
		STD2	.100000	.098667	.001333
		STD3	.500000	.468340	.031660
		STD4	1.00000	.891542	.108458

CorCoef: 0.99969

0043

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl1908	190.864	STD BLK	.000000	-.000023	.000023
		STD1	.010000	.012385	-.002385
		STD2	.100000	.091575	.008425
		STD3	.500000	.472478	.027522
		STD4	1.00000	.900811	.099189

CorCoef: 0.99971

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V_2924	292.402	STD BLK	.000000	-.000002	.000002
		STD1	.010000	.010196	-.000196
		STD2	.100000	.102463	-.002463
		STD3	.500000	.494556	.005444
		STD4	1.00000	.966624	.033376

CorCoef: 0.99993

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn2062	206.200	STD BLK	.000000	-.000009	.000009
		STD1	.010000	.010873	-.000873
		STD2	.100000	.102664	-.002664
		STD3	.500000	.487621	.012379
		STD4	1.00000	.910853	.089147

CorCoef: 0.99940

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
P' 203	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se1960	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
B_2496	249.678	STD BLK	.000000	-.000006	.000006
		STD1	.010000	.010620	-.000620
		STD2	.100000	.100073	-.000073
		STD3	.500000	.492321	.007679
		STD4	1.00000	.952589	.047411

CorCoef: 0.99987

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Si2881	288.150	STD BLK	.000000	-.000059	.000059
		STD1	.100000	.106064	-.006064
		STD2	1.00000	.987674	.012326
		STD3	5.00000	4.91997	.080035
		STD4	10.0000	9.67688	.323122

CorCoef: 0.99997

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba172	417.206	STD BLK	.000000	-.000255	.000255
		STD1	.010000	.036599	-.026599
		STD2	.100000	.017562	.082438
		STD3	.500000	.055480	.444520
		STD4	1.00000	.053547	.946453

CorCoef: -0.75188

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn1899	189.980	STD BLK	.000000	.000108	-.000108
		STD1	.010000	.000108	.009892
		STD2	.100000	.000108	.099892
		STD3	.500000	.000108	.499892
		STD4	1.00000	3.98791	-2.98791

CorCoef: 0.88019

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo2020	202.030	STD BLK	.000000	.000001	-.000001
		STD1	.010000	.009831	.000169
		STD2	.100000	.103571	-.003571
		STD3	.500000	.508100	-.008100
		STD4	1.00000	.964956	.035044

CorCoef: 0.99966

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
S 215	421.550	STD BLK	.000000	-.000002	.000002
		STD1	.010000	.010141	-.000141
		STD2	.100000	.103872	-.003872
		STD3	.500000	.499176	.000824
		STD4	1.00000	.948788	.051212

CorCoef: 0.99966

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ti3349	334.940	STD BLK	.000000	.000517	-.000517
		STD1	.050000	.000517	.049483
		STD2	1.00000	.000517	.999483
		STD3	5.00000	.000517	4.99948
		STD4	10.0000	39.8903	-29.8903

CorCoef: 0.87963

Analysis Report

QC Standard

01/17/01 04:11:57 PM

page 1

Method: NEW

Sample Name: ICV

Operator: JAC

Time: 01/17/01 16:04:01

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.508	.2423	.2725	.2584	.2624	.2568	12.68
SDev	.035	.0056	.0040	.0029	.0048	.0051	.19
%RSD	1.401	2.290	1.465	1.112	1.819	1.970	1.486
#1	2.533	.2383	Q.2753	.2605	.2657	.2604	12.81
#2	2.484	.2462	.2697	.2564	.2590	.2533	12.54
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	2.500	.2500	.2500	.2500	.2500	.2500	12.50
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2478	.2544	.2562	2.577	12.54	.2568	.2527
SDev	.0044	.0017	.0070	.015	.11	.0091	.0011
%RSD	1.765	.6825	2.751	.5870	.9142	3.539	.4370
#1	.2509	.2556	.2612	2.587	12.62	.2632	.2535
#2	.2447	.2531	.2512	2.566	12.46	.2504	.2520
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.2500	.2500	.2500	2.500	12.50	.2500	.2500
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2573	.2583	11.88	.2406	24.17	.2594	.2367
SDev	.0008	.0030	.17	.0019	.46	.0083	.0094
%RSD	.3034	1.178	1.403	.7860	1.897	3.185	3.971
#1	.2568	.2605	12.00	.2419	24.50	.2653	.2434
#2	.2579	.2562	11.76	.2392	23.85	.2536	.2301
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK
Value			12.50	.2500	25.00		
Range			10.00	10.00	10.00		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2358	.2536	.2445	.2580	.2443	.2398	2.456
SDev	.0027	.0007	.0017	.0018	.0090	.0003	.006
%RSD	1.164	.2712	.7019	.6855	3.693	.1271	.2577
#1	.2338	.2531	.2433	.2592	.2507	.2400	2.461
#2	.2377	.2541	.2457	.2567	.2379	.2396	2.452
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.2500	.2500	.2500	.2500	.2500	.2500	2.500
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0046

Units	ppm	ppm	ppm	ppm	ppm
Avg	Q.0550	Q.0001	.2570	.2563	Q.0005
SDev	.0261	.0000	.0034	.0021	.0000
%RSD	47.39	.0000	1.338	.8195	.0000
#1	Q.0366	Q.0001	.2594	.2578	Q.0005
#2	Q.0735	Q.0001	.2545	.2548	Q.0005
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Fail
Value	.2500	.2500	.2500	.2500	2.500
Range	10.00	10.00	10.00	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avg	1780	--	--	--	--	--	--
SDev	25.17299	--	--	--	--	--	--
%RSD	1.413974	--	--	--	--	--	--
#1	1762	--	--	--	--	--	--
#2	1798	--	--	--	--	--	--

Analysis Report

01/17/01 04:19:56 PM

page 1

Method: NEW Sample Name: ICB

Operator: JAC

Time: 01/17/01 16:12:00

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0049	.0028	.0046	.0002	.0001	.0002	-.0023
SDev	.0024	.0008	.0019	.0001	.0000	.0001	.0060
%RSD	48.14	29.81	40.65	49.03	42.21	69.84	255.0

#1	.0066	.0034	.0059	.0002	.0001	.0001	.0019
#2	.0032	.0022	.0033	.0001	.0000	.0003	-.0066

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0600	.0100	.2000	.0050	.0050	5.000
Low	-.2000	-.0600	-.0100	-.2000	-.0050	-.0050	-5.000

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0003	.0007	-.0009	.0057	.0070	.0003	.0005
SDev	.0008	.0001	.0002	.0031	.0049	.0001	.0009
%RSD	257.6	20.34	16.86	54.02	69.62	39.65	172.8

#1	.0009	.0008	-.0008	.0035	.0104	.0004	-.0001
#2	-.0003	.0006	-.0011	.0079	.0035	.0002	.0012

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0500	.0250	.1000	5.000	.0150	.0400
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0150	-.0400

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0000	-.0021	.0094	.0006	.0846	.0030	.0010
SDev	.0000	.0006	.0244	.0001	.0226	.0017	.0010
%RSD	360.8	27.09	260.8	13.11	26.65	55.25	94.28

#1	-.0000	-.0017	-.0079	.0005	.0687	.0018	.0017
#2	.0000	-.0025	.0266	.0006	.1006	.0042	.0003

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			5.000	.0100	5.000		
Low			-5.000	-.0100	-5.000		

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0049	.0003	.0001	-.0014	.0017	.0003	-.0076
SDev	.0021	.0003	.0010	.0004	.0001	.0001	.0034
%RSD	41.44	70.88	904.0	26.36	5.484	22.03	44.15

#1	.0035	.0002	-.0006	-.0011	.0018	.0002	-.0052
#2	.0064	.0005	.0008	-.0016	.0016	.0003	-.0100

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	.0100	.0500	.0200	.0030	.0050		
Low	-.0100	-.0500	-.0200	-.0030	-.0050		

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		
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0048

its	ppm	ppm	ppm	ppm	ppm
Avge	.0192	.0001	.0005	.0001	.0005
SDev	.0246	.0000	.0000	.0001	.0000
%RSD	128.6	.0000	3.649	73.75	.0000

#1	.0017	.0001	.0005	.0002	.0005
#2	.0366	.0001	.0005	.0001	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mem	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avge	1943	--	--	--	--	--	--
SDev	56.85140	--	--	--	--	--	--
RSD	2.925960	--	--	--	--	--	--
#1	1903	--	--	--	--	--	--
2	1983	--	--	--	--	--	--

Method: NEW Sample Name: CRI Operator: JAC
 Time: 01/17/01 16:19:59
 Comment:
 Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2325	.1244	.0196	.0224	.0111	.0116	.2174
SDev	.0160	.0056	.0047	.0007	.0005	.0006	.0088
%RSD	6.871	4.489	24.05	3.305	4.168	5.527	4.052

#1	.2438	.1284	.0163	.0229	.0115	.0120	.2236
#2	.2212	.1205	.0229	.0219	.0108	.0111	.2112

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0230	.1049	.0545	.1138	.2138	.0329	.0854
SDev	.0013	.0025	.0035	.0080	.0122	.0008	.0003
%RSD	5.426	2.357	6.402	7.020	5.691	2.487	.3539

#1	.0239	.1066	.0570	.1195	.2224	.0334	.0852
#2	.0221	.1031	.0521	.1082	.2052	.0323	.0856

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0091	.0056	.5145	.0200	.7110	.0113	.0063
SDev	.0022	.0017	.0053	.0003	.0497	.0038	.0003
%RSD	24.13	30.71	1.026	1.566	6.995	33.63	4.774

#1	.0107	.0068	.5183	.0203	.6758	.0086	.0061
#2	.0076	.0044	.5108	.0198	.7462	.0139	.0065

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0236	.1071	.0425	.0068	.0079	.0730	.4954
SDev	.0042	.0046	.0009	.0019	.0015	.0009	.0272
%RSD	17.78	4.339	2.229	27.76	18.41	1.251	5.486

#1	.0265	.1104	.0431	.0081	.0069	.0737	.5147
#2	.0206	.1038	.0418	.0055	.0090	.0724	.4762

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0019	.0001	.0218	.0114	.0005
SDev	.0014	.0000	.0002	.0001	.0000
%RSD	70.68	.0000	1.003	1.230	.0000

#1	-.0029	.0001	.0217	.0115	.0005
#2	-.0010	.0001	.0220	.0113	.0005

Std	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1723	--	--	--	--	--	--
SDev	60.45763	--	--	--	--	--	--
%RSD	3.507942	--	--	--	--	--	--
#1	1681	--	--	--	--	--	--
#2	1766	--	--	--	--	--	--

Analysis Report

QC Standard

01/17/01 04:35:53 PM

page 1

Method: NEW

Sample Name: ICSA

Operator: JAC

Time: 01/17/01 16:27:57

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	240.7	-.0001	-.0018	.0005	.0001	.0133	242.0
SDev	.2	.0008	.0054	.0001	.0001	.0018	.3
%RSD	.0751	697.7	300.7	9.809	171.3	13.44	.1438
#1	240.5	.0004	.0020	.0005	.0001	.0146	242.2
#2	240.8	-.0007	-.0057	.0005	-.0000	.0120	241.7
Errors	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value	250.0						250.0
Range	20.00						20.00

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0046	.0011	.0013	99.37	262.2	.0011	.0005
SDev	.0009	.0004	.0001	.85	1.0	.0001	.0001
%RSD	18.59	40.50	7.757	.8595	.3624	4.529	17.45
#1	.0052	.0014	.0012	99.97	262.9	.0012	.0006
#2	.0040	.0008	.0014	98.76	261.5	.0011	.0005
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK	NOCHECK
Value				100.0	250.0		
Range				20.00	20.00		

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0467	-.0197	.0223	.0007	.0643	-.0076	-.0438
SDev	.0029	.0002	.0018	.0000	.0610	.0036	.0016
%RSD	6.098	1.173	8.171	.0508	94.96	47.15	3.679
#1	.0447	-.0195	.0236	.0007	.1074	-.0101	-.0449
#2	.0487	-.0199	.0210	.0007	.0211	-.0051	-.0426
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0940	.0010	-.0025	.0024	-.0317	.0032	.0373
SDev	.0041	.0006	.0011	.0008	.0023	.0001	.0022
%RSD	4.359	56.43	43.61	32.59	7.156	3.876	5.822
#1	.0911	.0014	-.0017	.0019	-.0333	.0031	.0357
#2	.0969	.0006	-.0033	.0030	-.0301	.0033	.0388
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		
Units	ppm	ppm	ppm	ppm	ppm		
Avge							
SDev							
%RSD							
#1							
#2							
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

0052

	its	ppm	ppm	ppm	ppm	ppm
Avge		.0181	.0001	-.0018	-.0159	.0005
SDev		.0262	.0000	.0000	.0003	.0000
%RSD		145.3	.0000	.2628	1.963	.0000

#1	-.0005	.0001	-.0018	-.0162	.0005
#2	.0366	.0001	-.0018	-.0157	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1784	--	--	--	--	--	--
SDev	5.798327	--	--	--	--	--	--
%RSD	.3249819	--	--	--	--	--	--
#1	1788	--	--	--	--	--	--
#2	1780	--	--	--	--	--	--

Analysis Report

QC Standard

01/17/01 04:43:51 PM

page 1

Method: NEW

Sample Name: ICSAB

Operator: JAC

Time: 01/17/01 16:35:56

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	247.9	.4734	.5596	.2727	.2508	.5084	247.5
SDev	8.7	.0165	.0082	.0063	.0093	.0113	11.5
%RSD	3.499	3.493	1.464	2.295	3.724	2.230	4.661

#1	241.8	.4617	.5538	.2683	.2442	.5004	239.3
#2	254.0	.4851	.5653	.2771	.2574	.5165	255.6

Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.0			.2500	.2500	.5000	250.0
Range	20.00			20.00	20.00	20.00	20.00

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2402	.2507	.2758	100.7	268.1	.2513	.4914
SDev	.0044	.0053	.0154	4.4	2.7	.0087	.0157
%RSD	1.841	2.100	5.574	4.353	1.012	3.448	3.196

#1	.2371	.2470	.2649	97.62	266.2	.2452	.4802
#2	.2434	.2544	.2867	103.8	270.1	.2574	.5025

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.2500	.2500	.2500	100.0	250.0	.2500	.5000
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5683	.5201	.0246	.4800	-.0013	1.110	.9227
SDev	.0059	.0019	.0323	.0187	.0273	.022	.0343
%RSD	1.041	.3593	131.5	3.892	2119.	1.970	3.721

#1	.5641	.5214	.0017	.4667	-.0206	1.095	.8984
#2	.5724	.5188	.0474	.4932	.0180	1.126	.9470

Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value				.5000			
Range				20.00			

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5471	.2538	.4554	.5362	.9852	.4968	1.996
SDev	.0165	.0018	.0053	.0007	.0302	.0122	.026
%RSD	3.022	.7184	1.174	.1355	3.063	2.448	1.278

#1	.5354	.2526	.4517	.5356	.9638	.4882	1.978
#2	.5588	.2551	.4592	.5367	1.007	.5054	2.014

Errors	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value		.2500	.5000	.5000			
Range		20.00	20.00	20.00			

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349
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0054

its	ppm	ppm	ppm	ppm	ppm
Avge	.0749	.0001	.5049	.5178	.0005
SDev	.0008	.0000	.0269	.0060	.0000
%RSD	1.135	.0000	5.323	1.159	.0000
#1	.0743	.0001	.4859	.5135	.0005
#2	.0755	.0001	.5239	.5220	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avge	1731	--	--	--	--	--	--
SDev	38.39593	--	--	--	--	--	--
RSD	2.218456	--	--	--	--	--	--
#1	1758	--	--	--	--	--	--
#2	1704	--	--	--	--	--	--

Method: NEW Sample Name: CCV Operator: JAC
 Time: 01/17/01 16:43:54
 Comment:
 Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.150	.4860	Q.5520	.5200	.5131	.5107	25.28
SDev	.048	.0057	.0012	.0053	.0065	.0044	.18
%RSD	.9348	1.175	.2117	1.009	1.262	.8694	.7069

#1	5.184	.4900	Q.5511	.5237	.5085	.5139	25.16
#2	5.116	.4819	Q.5528	.5162	.5177	.5076	25.41

Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000	.5000	.5000	.5000	.5000	.5000	25.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5098	.5112	.5136	5.123	25.79	.5228	Q.6090
SDev	.0006	.0106	.0086	.072	.09	.0048	.0047
%RSD	.1252	2.068	1.685	1.403	.3572	.9106	.7755

#1	.5102	.5186	.5075	5.072	25.73	.5262	Q.6057
#2	.5093	.5037	.5197	5.174	25.86	.5194	Q.6124

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.5000	.5000	.5000	5.000	25.00	.5000	.5000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5175	.5290	26.07	.4783	50.08	.5596	.4784
SDev	.0025	.0060	.11	.0004	.36	.0063	.0053
%RSD	.4792	1.141	.4157	.0825	.7185	1.130	1.115

#1	.5157	.5333	26.14	.4786	49.82	.5552	.4746
#2	.5192	.5247	25.99	.4780	50.33	.5641	.4821

Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK
Value			25.00	.5000	50.00		
Range			10.00	10.00	10.00		

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4823	.5261	.4930	.5252	.5055	.4916	5.052
SDev	.0014	.0013	.0068	.0032	.0057	.0070	.076
%RSD	.3012	.2383	1.385	.6090	1.121	1.430	1.511

#1	.4833	.5270	.4979	.5274	.5014	.4866	4.998
#2	.4813	.5252	.4882	.5229	.5095	.4966	5.106

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5000	.5000	.5000	.5000	.5000	.5000	5.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349
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0056

Units	ppm	ppm	ppm	ppm	ppm		
Avg	Q.0366	Q.0001	.5143	.5117	Q.0005		
SDev	.0000	.0000	.0029	.0027	.0000		
%RSD	.0000	.0000	.5557	.5291	.0000		
#1	Q.0366	Q.0001	.5123	.5098	Q.0005		
#2	Q.0366	Q.0001	.5163	.5136	Q.0005		
Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Fail		
Value	.5000	.5000	.5000	.5000	5.000		
Range	10.00	10.00	10.00	10.00	10.00		
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avg	1789	--	--	--	--	--	--
SDev	12.94009	--	--	--	--	--	--
%RSD	.7234556	--	--	--	--	--	--
#1	1780	--	--	--	--	--	--
#2	1798	--	--	--	--	--	--

Method: NEW

Sample Name: CCB

Operator: JAC

Time: 01/17/01 16:51:52

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0243	.0030	-.0033	.0004	.0001	.0003	.0316
SDev	.0182	.0005	.0017	.0002	.0003	.0001	.0320
%RSD	74.92	17.12	50.05	54.71	376.2	21.57	101.1
#1	.0372	.0026	-.0045	.0005	.0002	.0003	.0543
#2	.0114	.0034	-.0022	.0002	-.0001	.0003	.0090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0600	.0100	.2000	.0050	.0050	5.000
Low	-.2000	-.0600	-.0100	-.2000	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	.0007	-.0006	.0051	.0435	.0004	.0001
SDev	.0004	.0001	.0017	.0090	.0294	.0001	.0003
%RSD	69.09	20.60	294.0	176.0	67.70	39.90	259.6
#1	.0009	.0008	.0006	.0115	.0643	.0005	-.0001
#2	.0003	.0006	-.0018	-.0013	.0227	.0003	.0004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0500	.0250	.1000	5.000	.0150	.0400
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0150	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0011	-.0010	.0136	.0007	.1140	.0040	.0002
SDev	.0003	.0016	.0278	.0000	.0261	.0024	.0004
%RSD	25.25	164.0	203.8	3.090	22.89	59.02	235.7
#1	.0009	.0002	-.0060	.0008	.0956	.0023	.0005
#2	.0013	-.0021	.0333	.0007	.1325	.0057	-.0001
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			5.000	.0100	5.000		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0081	.0004	-.0002	-.0003	.0015	.0006	-.0023
SDev	.0000	.0003	.0005	.0010	.0005	.0006	.0003
%RSD	.0330	75.41	222.1	352.6	35.54	102.7	12.82
#1	.0081	.0005	.0001	.0004	.0011	.0010	-.0020
#2	.0081	.0002	-.0006	-.0010	.0018	.0002	-.0025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	.0100	.0500	.0200	.0030	.0050		
Low	-.0100	-.0500	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0058

Units	ppm	ppm	ppm	ppm	ppm
Avg	.0366	.0001	-.0001	.0003	.0005
SD	.0000	.0000	.0005	.0001	.0000
%RSD	.0000	.0000	631.2	49.92	.0000
#1	.0366	.0001	-.0004	.0004	.0005
#2	.0366	.0001	.0003	.0002	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avg	1933	--	--	--	--	--	--
SD	13.01078	--	--	--	--	--	--
%RSD	.6730875	--	--	--	--	--	--
#1	1924	--	--	--	--	--	--
#2	1942	--	--	--	--	--	--

Analysis Report

01/17/01 05:07:46 PM

page 1

Method: NEW Sample Name: 12350

Operator: JAC

Time: 01/17/01 16:59:51

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0421	.0007	-.0033	.0019	-.0000	.0005	.2825
SDev	.0067	.0007	.0044	.0000	.0000	.0001	.0061
%RSD	15.96	100.1	131.8	1.345	5.647	29.14	2.161

#1	.0373	.0002	-.0064	.0018	-.0000	.0006	.2782
#2	.0468	.0011	-.0002	.0019	-.0000	.0004	.2869

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	-.0011	.0702	.5827	.0523	.0022	.0010
SDev	.0000	.0001	.0012	.0263	.0012	.0000	.0001
%RSD	.9974	13.34	1.644	4.508	2.333	1.202	10.02

#1	.0015	-.0012	.0694	.5641	.0514	.0023	.0010
#2	.0016	-.0010	.0711	.6013	.0532	.0022	.0011

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0139	.0042	.1211	.0009	.4354	-.0054	.0058
SDev	.0004	.0012	.0157	.0000	.0123	.0018	.0020
%RSD	2.691	28.88	12.95	2.783	2.822	32.88	34.76

#1	.0142	.0034	.1100	.0009	.4441	-.0042	.0044
#2	.0136	.0051	.1322	.0009	.4267	-.0067	.0073

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0010	.0006	.0278	.0074	.0021	.0225	.1755
SDev	.0018	.0000	.0017	.0007	.0008	.0005	.0023
%RSD	168.2	1.646	6.238	9.229	36.39	2.281	1.315

#1	-.0023	.0006	.0266	.0070	.0016	.0221	.1739
#2	.0002	.0006	.0291	.0079	.0026	.0228	.1771

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		
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0060

Units	ppm	ppm	ppm	ppm	ppm
Avg	-0.0013	.0001	.0013	.0016	.0005
SDev	.0005	.0000	.0001	.0000	.0000
%RSD	36.95	.0000	11.11	1.226	.0000
#1	-.0009	.0001	.0012	.0016	.0005
#2	-.0016	.0001	.0014	.0016	.0005
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avg	1752	--	--	--	--	--	--
SDev	21.63754	--	--	--	--	--	--
%RSD	1.235090	--	--	--	--	--	--
#1	1767	--	--	--	--	--	--
#2	1737	--	--	--	--	--	--

Analysis Report

01/17/01 05:15:45 PM

page 1

Method: NEW Sample Name: 12351
 Time: 01/17/01 17:07:49
 Comment:
 Mode: CONC Corr. Factor: 1

Operator: JAC

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.744	.4315	.4882	.6353	.5104	.4862	.8472
SDev	.135	.0054	.0170	.0136	.0065	.0111	.0070
%RSD	2.352	1.244	3.478	2.143	1.269	2.273	.8292
#1	5.840	.4277	.5003	.6450	.5150	.4940	.8521
#2	5.649	.4352	.4762	.6257	.5058	.4783	.8422
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4661	.4673	.5784	8.374	.5349	.4929	.4839
SDev	.0092	.0183	.0009	.370	.0111	.0014	.0138
%RSD	1.975	3.911	.1540	4.424	2.081	.2835	2.847
#1	.4726	.4803	.5791	8.636	.5428	.4939	.4937
#2	.4596	.4544	.5778	8.112	.5271	.4919	.4742
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4909	.5015	.1297	.5326	.4088	.4285	.3669
SDev	.0052	.0073	.0095	.0043	.0152	.0164	.0225
%RSD	1.060	1.465	7.365	.8028	3.717	3.817	6.129
#1	.4946	.5067	.1364	.5356	.3981	.4401	.3828
#2	.4872	.4963	.1229	.5295	.4196	.4170	.3510
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4255	.4923	.4716	.4979	.3875	.5545	.9886
SDev	.0202	.0178	.0160	.0066	.0204	.0139	.0211
%RSD	4.751	3.614	3.386	1.332	5.277	2.500	2.137
#1	.4398	.5049	.4829	.5026	.4019	.5643	1.004
#2	.4112	.4797	.4603	.4933	.3730	.5447	.9737
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0062

Units	ppm	ppm	ppm	ppm	ppm
Avg	.0366	.0001	.4972	.6506	.0005
SDev	.0000	.0000	.0152	.0192	.0000
%RSD	.0000	.0000	3.050	2.943	.0000
#1	.0366	.0001	.5079	.6642	.0005
#2	.0366	.0001	.4864	.6371	.0005

Errors NOCHECK NOCHECK NOCHECK NOCHECK NOCHECK
High
Low

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avg	1801	--	--	--	--	--	--
SDev	50.62891	--	--	--	--	--	--
RSD	2.811312	--	--	--	--	--	--
#1	1765	--	--	--	--	--	--
#2	1837	--	--	--	--	--	--

Analysis Report

01/17/01 05:23:43 PM

page 1

Method: NEW

Sample Name: 12352

Operator: JAC

Time: 01/17/01 17:15:47

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0496	.0042	-.0004	.0014	.0001	.0007	24.75
SDev	.0078	.0003	.0016	.0001	.0001	.0001	2.13
%RSD	15.68	6.900	381.8	10.58	86.56	14.21	8.601
#1	.0551	.0044	-.0016	.0015	.0000	.0008	26.25
#2	.0441	.0040	.0007	.0013	.0001	.0006	23.24
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	-.0008	.0574	.0127	24.35	.0065	.0010
SDev	.0004	.0003	.0052	.0054	1.68	.0006	.0001
%RSD	72.42	33.63	9.118	42.39	6.893	8.802	11.85
#1	.0009	-.0006	.0611	.0165	25.54	.0069	.0009
#2	.0003	-.0010	.0537	.0089	23.17	.0061	.0011
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0096	.0016	23.53	.0015	25.06	-.0064	.0086
SDev	.0004	.0014	1.27	.0001	1.64	.0003	.0076
%RSD	4.628	84.58	5.402	7.456	6.548	4.427	87.75
#1	.0099	.0007	24.43	.0016	26.22	-.0066	.0033
#2	.0093	.0026	22.63	.0014	23.90	-.0062	.0140
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0013	.0002	.0179	.0043	.0036	.0294	.2517
SDev	.0018	.0000	.0005	.0008	.0052	.0027	.0260
%RSD	141.4	11.33	2.655	17.89	142.0	9.169	10.31
#1	-.0026	.0002	.0182	.0037	-.0000	.0313	.2701
#2	.0000	.0002	.0176	.0048	.0073	.0275	.2334
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0064

Units	ppm	ppm	ppm	ppm	ppm		
Avg	.0731	.0001	.0010	-.0016	.0005		
SDev	.0020	.0000	.0004	.0001	.0000		
%RSD	2.723	.0000	40.11	8.290	.0000		
#1	.0745	.0001	.0007	-.0017	.0005		
#2	.0717	.0001	.0012	-.0015	.0005		
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK		
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avg	1821	--	--	--	--	--	--
SDev	99.34850	--	--	--	--	--	--
RSD	5.455561	--	--	--	--	--	--
#1	1751	--	--	--	--	--	--
#2	1891	--	--	--	--	--	--

Analysis Report

01/17/01 05:31:41 PM

page 1

Method: NEW Sample Name: 12353

Operator: JAC

Time: 01/17/01 17:23:46

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.668	.6165	2.601	2.633	.0679	.0706	25.44
SDev	.068	.0218	.052	.041	.0014	.0010	.40
%RSD	2.545	3.534	1.986	1.542	2.125	1.389	1.573
#1	2.620	.6011	2.565	2.605	.0668	.0699	25.16
#2	2.716	.6319	2.638	2.662	.0689	.0713	25.72
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2687	.6339	.4095	1.594	24.02	.6433	.6365
SDev	.0075	.0164	.0078	.006	.82	.0131	.0195
%RSD	2.786	2.583	1.912	.3876	3.408	2.035	3.059
#1	.2634	.6223	.4039	1.589	23.45	.6340	.6228
#2	.2740	.6454	.4150	1.598	24.60	.6525	.6503
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6648	.6802	24.36	.0676	23.89	2.304	1.942
SDev	.0099	.0181	.55	.0006	.26	.025	.013
%RSD	1.488	2.667	2.252	.8576	1.101	1.065	.6925
#1	.6578	.6673	23.97	.0672	23.70	2.286	1.951
#2	.6718	.6930	24.74	.0680	24.07	2.321	1.932
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.345	.7101	.6207	.6751	2.063	1.015	3.758
SDev	.053	.0355	.0248	.0154	.001	.038	.092
%RSD	2.255	4.996	3.996	2.280	.0380	3.782	2.451
#1	2.308	.6850	.6032	.6642	2.063	.9878	3.692
#2	2.382	.7352	.6383	.6859	2.062	1.042	3.823
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0066

Units	ppm	ppm	ppm	ppm	ppm		
Avge	.0540	.0001	1.412	1.408	.0005		
SDev	.0246	.0000	.049	.032	.0000		
%RSD	45.59	.0000	3.481	2.238	.0000		
#1	.0714	.0001	1.377	1.385	.0005		
#2	.0366	.0001	1.447	1.430	.0005		
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK		
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1874	--	--	--	--	--	--
SDev	43.55776	--	--	--	--	--	--
%RSD	2.324692	--	--	--	--	--	--
#1	1904	--	--	--	--	--	--
#2	1843	--	--	--	--	--	--

Analysis Report

01/17/01 05:39:39 PM

page 1

Method: NEW

Sample Name: 11545.1

Operator: JAC

Run Time: 01/17/01 17:31:44

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1051	.0031	.0023	.1603	-.0001	.0004	88.42
SDev	.0070	.0001	.0068	.0029	.0000	.0000	1.09
%RSD	6.687	4.268	293.7	1.782	20.88	2.627	1.228
#1	.1001	.0032	-.0025	.1583	-.0001	.0004	87.65
#2	.1101	.0030	.0071	.1623	-.0001	.0004	89.19
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0002	.0843	.0930	16.97	.0069	.0034
SDev	.0000	.0002	.0016	.0118	.75	.0001	.0001
%RSD	2.496	103.7	1.878	12.65	4.436	.9019	2.420
#1	.0009	-.0001	.0832	.1013	16.44	.0070	.0034
#2	.0009	-.0003	.0854	.0847	17.50	.0069	.0035
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0157	.0091	4.886	.0009	111.5	-.0048	.0063
SDev	.0008	.0002	.171	.0006	1.7	.0027	.0047
%RSD	5.063	1.736	3.502	65.66	1.519	55.35	75.02
#1	.0163	.0092	4.765	.0013	110.3	-.0029	.0096
#2	.0151	.0090	5.007	.0005	112.7	-.0067	.0030
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0017	.0004	.0238	.0113	.0026	.0981	3.791
SDev	.0034	.0003	.0009	.0004	.0040	.0064	.100
%RSD	196.1	66.95	3.812	3.276	155.0	6.528	2.650
#1	.0007	.0006	.0232	.0116	.0055	.0936	3.719
#2	-.0041	.0002	.0244	.0110	-.0002	.1026	3.862
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0068

	its	ppm	ppm	ppm	ppm	ppm
Avge		.0356	.0001	.0018	.1365	.0005
SDev		.0520	.0000	.0006	.0039	.0000
%RSD		146.1	.0000	34.81	2.854	.0000

#1	.0724	.0001	.0023	.1338	.0005
#2	-.0012	.0001	.0014	.1393	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Row					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
len	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avge	1804	--	--	--	--	--	--
Dev	67.10445	--	--	--	--	--	--
RSD	3.720274	--	--	--	--	--	--

#1	1851	--	--	--	--	--	--
2	1756	--	--	--	--	--	--

Analysis Report

01/17/01 05:47:37 PM

page 1

Method: NEW

Sample Name: 11545.1A

Operator: JAC

Time: 01/17/01 17:39:42

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.159	.1851	.2071	.3729	.1941	.2101	94.06
SDev	.030	.0013	.0031	.0014	.0040	.0030	1.05
%RSD	1.384	.6975	1.505	.3896	2.043	1.449	1.120

#1	2.180	.1860	.2093	.3739	.1969	.2122	94.80
#2	2.138	.1842	.2049	.3719	.1913	.2079	93.31

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2005	.2072	.2911	2.157	24.98	.2031	.1969
SDev	.0035	.0034	.0031	.056	.95	.0017	.0053
%RSD	1.739	1.657	1.059	2.586	3.796	.8402	2.716

#1	.2030	.2096	.2932	2.196	25.65	.2019	.2007
#2	.1981	.2048	.2889	2.117	24.31	.2043	.1931

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2130	.2101	15.03	.2435	120.5	.1900	.1634
SDev	.0024	.0020	.26	.0021	.2	.0046	.0006
%RSD	1.117	.9725	1.698	.8614	.1259	2.401	.3560

#1	.2147	.2116	15.21	.2420	120.4	.1932	.1638
#2	.2113	.2087	14.85	.2450	120.6	.1868	.1630

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1881	.2172	.2146	.2111	.1723	.2853	5.649
SDev	.0160	.0124	.0043	.0022	.0019	.0096	.241
%RSD	8.532	5.734	1.995	1.021	1.108	3.368	4.266

#1	.1995	.2260	.2177	.2126	.1736	.2921	5.819
#2	.1768	.2084	.2116	.2096	.1709	.2785	5.478

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		
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0070

Units	ppm	ppm	ppm	ppm	ppm		
Avg	.0546	.0001	.2098	.3491	.0005		
SDev	.0255	.0000	.0026	.0084	.0000		
%RSD	46.70	.0000	1.232	2.421	.0000		
#1	.0366	.0001	.2117	.3551	.0005		
#2	.0727	.0001	.2080	.3431	.0005		
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK		
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mem	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avg	1815	--	--	--	--	--	--
Dev	31.60772	--	--	--	--	--	--
RSD	1.741137	--	--	--	--	--	--
#1	1793	--	--	--	--	--	--
#2	1838	--	--	--	--	--	--

Analysis Report

01/17/01 05:55:36 PM

page 1

Method: NEW

Sample Name: 11545.1L

Operator: JAC

Time: 01/17/01 17:47:40

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0328	.0016	.0009	.0383	-.0000	.0003	21.96
SDev	.0066	.0025	.0019	.0007	.0001	.0002	.78
%RSD	20.12	160.7	212.8	1.858	166.5	61.69	3.551
#1	.0374	-.0002	-.0005	.0388	.0000	.0002	22.51
#2	.0281	.0033	.0023	.0378	-.0001	.0004	21.41
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0003	.0175	.0250	4.330	.0017	.0002
SDev	.0000	.0001	.0002	.0054	.141	.0000	.0001
%RSD	.0000	50.86	1.378	21.64	3.250	1.487	54.62
#1	.0003	.0004	.0176	.0288	4.429	.0017	.0003
#2	.0003	.0002	.0173	.0212	4.230	.0017	.0001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050	.0004	1.106	.0100	24.68	.0011	.0046
SDev	.0004	.0017	.024	.0001	.63	.0011	.0029
%RSD	7.998	448.4	2.186	.5785	2.542	96.77	64.11
#1	.0052	.0016	1.123	.0100	25.13	.0004	.0025
#2	.0047	-.0008	1.089	.0101	24.24	.0019	.0066
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0030	.0002	.0058	.0019	.0034	.0254	.9445
SDev	.0002	.0000	.0009	.0013	.0023	.0004	.0365
%RSD	7.360	3.065	14.89	67.61	67.72	1.433	3.869
#1	.0032	.0002	.0064	.0028	.0018	.0256	.9703
#2	.0029	.0002	.0052	.0010	.0051	.0251	.9186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0072

Units	ppm	ppm	ppm	ppm	ppm		
Avg	.0191	.0001	.0004	.0329	.0005		
SD	.0247	.0000	.0003	.0011	.0000		
%RSD	129.2	.0000	86.94	3.500	.0000		
#1	.0366	.0001	.0002	.0337	.0005		
#2	.0017	.0001	.0006	.0321	.0005		
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK		
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avg	1880	--	--	--	--	--	--
Dev	26.72867	--	--	--	--	--	--
RSD	1.422116	--	--	--	--	--	--
#1	1861	--	--	--	--	--	--
2	1898	--	--	--	--	--	--

Analysis Report

01/17/01 06:03:35 PM

page 1

Method: NEW

Sample Name: 11545.1D

Operator: JAC

Time: 01/17/01 17:55:39

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1165	.0021	.0025	.1683	-.0000	.0004	90.67
SDev	.0039	.0027	.0017	.0029	.0000	.0003	4.86
%RSD	3.371	126.2	67.38	1.717	94.54	82.94	5.363
#1	.1138	.0002	.0013	.1662	-.0000	.0002	87.23
#2	.1193	.0040	.0038	.1703	-.0000	.0006	94.11
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0009	.0001	.0571	.1180	17.86	.0064	.0020
SDev	.0000	.0001	.0024	.0010	.74	.0002	.0011
%RSD	1.833	180.1	4.209	.8656	4.117	3.612	57.88
#1	.0009	.0002	.0554	.1187	17.34	.0062	.0012
#2	.0009	-.0000	.0588	.1173	18.38	.0065	.0028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0082	.0037	5.235	.0007	115.4	-.0070	.0031
SDev	.0006	.0001	.132	.0001	4.0	.0047	.0065
%RSD	7.605	3.648	2.519	10.04	3.495	67.29	212.4
#1	.0078	.0038	5.142	.0007	112.5	-.0103	.0077
#2	.0087	.0036	5.328	.0008	118.3	-.0037	-.0015
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0011	.0004	.0169	.0052	-.0003	.0768	3.985
SDev	.0019	.0003	.0013	.0001	.0028	.0042	.213
%RSD	174.6	67.87	7.635	2.297	945.2	5.404	5.357
#1	-.0024	.0006	.0160	.0051	.0017	.0739	3.834
#2	.0003	.0002	.0179	.0053	-.0022	.0798	4.136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0074

Units	ppm	ppm	ppm	ppm	ppm
Avg	.0548	.0001	.0010	.1441	.0005
SDev	.0258	.0000	.0006	.0041	.0000
%RSD	47.03	.0000	52.51	2.831	.0000

#1	.0731	.0001	.0007	.1412	.0005
#2	.0366	.0001	.0014	.1470	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avg	1784	--	--	--	--	--	--
SDev	48.57820	--	--	--	--	--	--
%RSD	2.722764	--	--	--	--	--	--
#1	1818	--	--	--	--	--	--
#2	1750	--	--	--	--	--	--

Analysis Report

01/17/01 06:11:33 PM

page 1

Method: NEW

Sample Name: 11545.1S

Operator: JAC

Time: 01/17/01 18:03:38

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.159	.6969	2.905	3.084	.0731	.0762	128.4
SDev	.057	.0092	.018	.027	.0009	.0016	1.9
%RSD	1.806	1.324	.6168	.8727	1.231	2.075	1.504
#1	3.200	.7034	2.918	3.103	.0737	.0773	129.8
#2	3.119	.6904	2.892	3.065	.0725	.0751	127.0
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2920	.6917	.4575	1.838	46.65	.7013	.6987
SDev	.0073	.0169	.0010	.039	1.31	.0194	.0106
%RSD	2.501	2.436	.2199	2.102	2.814	2.765	1.517
#1	.2972	.7036	.4583	1.865	47.57	.7150	.7062
#2	.2868	.6798	.4568	1.810	45.72	.6876	.6912
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7342	.7406	39.61	.0380	171.5	2.573	2.141
SDev	.0099	.0157	.56	.0007	2.5	.056	.007
%RSD	1.350	2.117	1.423	1.872	1.433	2.191	.3225
#1	.7412	.7517	40.01	.0385	173.3	2.533	2.136
#2	.7272	.7295	39.21	.0375	169.8	2.613	2.146
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.651	.7738	.6617	.7384	2.285	1.200	10.90
SDev	.052	.0182	.0268	.0138	.023	.023	.37
%RSD	1.977	2.347	4.053	1.863	1.024	1.938	3.377
#1	2.688	.7866	.6806	.7482	2.268	1.216	11.16
#2	2.614	.7610	.6427	.7287	2.301	1.183	10.64
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0076

	its	ppm	ppm	ppm	ppm	ppm
Avg	.0552	.0001	1.550	1.711	.0005	
SDev	.0263	.0000	.007	.048	.0000	
%RSD	47.65	.0000	.4269	2.819	.0000	
#1	.0366	.0001	1.545	1.745	.0005	
#2	.0738	.0001	1.555	1.677	.0005	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
High						
Low						
IntStd	1	2	3	4	5	6
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--
Navlen	371.030	--	--	--	--	--
Avg	1758	--	--	--	--	--
SDev	35.99175	--	--	--	--	--
%RSD	2.047487	--	--	--	--	--
#1	1732	--	--	--	--	--
#2	1783	--	--	--	--	--

Analysis Report

01/17/01 06:19:32 PM

page 1

Method: NEW

Sample Name: 11545.2

Operator: JAC

Time: 01/17/01 18:11:36

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0707	.0027	-.0023	.2198	.0000	.0004	121.5
SDev	.0045	.0013	.0072	.0071	.0000	.0000	4.7
%RSD	6.329	50.33	307.3	3.211	599.4	2.055	3.865
#1	.0739	.0036	-.0074	.2247	-.0000	.0005	124.8
#2	.0675	.0017	.0028	.2148	.0000	.0004	118.2
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0006	-.0003	.0640	.5034	22.40	1.410	.0013
SDev	.0004	.0002	.0034	.0107	.73	.038	.0010
%RSD	72.64	88.65	5.289	2.128	3.277	2.731	79.23
#1	.0009	-.0001	.0664	.5109	22.92	1.437	.0020
#2	.0003	-.0004	.0616	.4958	21.88	1.382	.0006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0072	.0027	6.052	.0009	48.18	-.0056	.0051
SDev	.0006	.0019	.203	.0002	2.25	.0028	.0032
%RSD	8.659	68.70	3.348	20.36	4.680	49.89	62.81
#1	.0076	.0014	6.195	.0010	49.77	-.0036	.0028
#2	.0068	.0040	5.909	.0007	46.58	-.0076	.0073
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0023	.0006	.0191	.0042	.0015	.1300	5.408
SDev	.0037	.0000	.0000	.0010	.0012	.0063	.194
%RSD	163.0	3.765	.0404	24.61	78.63	4.816	3.591
#1	.0049	.0006	.0191	.0035	.0007	.1345	5.545
#2	-.0003	.0006	.0191	.0049	.0024	.1256	5.270
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0078

ts	ppm	ppm	ppm	ppm	ppm
ave	.0366	.0001	.0019	.2994	.0005
SDev	.0000	.0000	.0002	.0124	.0000
%RSD	.0000	.0000	10.68	4.156	.0000
#1	.0366	.0001	.0020	.3082	.0005
#2	.0366	.0001	.0018	.2906	.0005
errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

High							
row							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	371.030	--	--	--	--	--	--
Avge	1775	--	--	--	--	--	--
Dev	49.92172	--	--	--	--	--	--
RSD	2.812175	--	--	--	--	--	--
#1	1740	--	--	--	--	--	--
2	1810	--	--	--	--	--	--

Analysis Report

QC Standard

01/17/01 06:27:30 PM

page 1

Method: NEW

Sample Name: CCV

Operator: JAC

F Time: 01/17/01 18:19:35

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.809	.4658	.5286	.4941	.4851	.4938	23.79
SDev	.087	.0078	.0003	.0077	.0168	.0047	.90
%RSD	1.802	1.666	.0542	1.566	3.470	.9457	3.798
#1	4.748	.4713	.5284	.4886	.4732	.4905	23.15
#2	4.871	.4603	.5288	.4996	.4970	.4971	24.43
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000	.5000	.5000	.5000	.5000	.5000	25.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4986	.4884	.4779	5.052	24.27	.5054	Q.5867
SDev	.0049	.0044	.0239	.211	.02	.0016	.0070
%RSD	.9741	.8918	4.998	4.175	.0764	.3088	1.193
#1	.5021	.4915	.4610	5.202	24.28	.5065	Q.5917
#2	.4952	.4853	.4948	4.903	24.25	.5043	Q.5818
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.5000	.5000	.5000	5.000	25.00	.5000	.5000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5051	.5184	24.94	.4677	48.87	.5344	.4678
SDev	.0113	.0142	.14	.0099	1.58	.0020	.0001
%RSD	2.237	2.745	.5608	2.112	3.233	.3745	.0310
#1	.5131	.5284	25.04	.4607	47.76	.5358	.4677
#2	.4971	.5083	24.84	.4747	49.99	.5330	.4679
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK
Value			25.00	.5000	50.00		
Range			10.00	10.00	10.00		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4672	.4993	.4680	.5139	.4900	.4718	4.740
SDev	.0060	.0027	.0014	.0132	.0006	.0047	.090
%RSD	1.276	.5429	.2937	2.579	.1164	.9997	1.893
#1	.4714	.5012	.4690	.5233	.4904	.4751	4.677
#2	.4630	.4974	.4670	.5046	.4896	.4684	4.804
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5000	.5000	.5000	.5000	.5000	.5000	5.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0080

	bits	ppm	ppm	ppm	ppm	ppm
Avge		Q.0545	Q.0001	.4988	.4980	Q.0005
SDev		.0253	.0000	.0040	.0046	.0000
%RSD		46.38	.0000	.8089	.9211	.0000

#1	Q.0723	Q.0001	.4959	.5012	Q.0005
#2	Q.0366	Q.0001	.5016	.4947	Q.0005

Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Fail
Value	.5000	.5000	.5000	.5000	5.000
Range	10.00	10.00	10.00	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1884	--	--	--	--	--	--
SDev	38.67871	--	--	--	--	--	--
%RSD	2.052846	--	--	--	--	--	--

#1	1857	--	--	--	--	--	--
#2	1912	--	--	--	--	--	--

Analysis Report

01/17/01 06:35:29 PM

page 1

Method: NEW

Sample Name: CCB

Operator: JAC

Time: 01/17/01 18:27:33

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0016	.0025	-.0032	.0003	-.0000	.0003	-.0014
SDev	.0093	.0008	.0026	.0001	.0000	.0001	.0077
%RSD	569.9	33.89	79.61	47.76	28.26	21.27	550.0
#1	.0049	.0019	-.0051	.0003	-.0001	.0003	.0040
#2	-.0082	.0031	-.0014	.0002	-.0000	.0002	-.0068
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0600	.0100	.2000	.0050	.0050	5.000
Low	-.2000	-.0600	-.0100	-.2000	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0007	-.0022	.0037	.0119	.0002	-.0002
SDev	.0008	.0003	.0004	.0103	.0088	.0002	.0003
%RSD	255.2	42.64	18.46	279.5	73.91	66.47	162.5
#1	.0009	.0009	-.0019	.0110	.0181	.0004	-.0003
#2	-.0003	.0005	-.0024	-.0036	.0057	.0001	.0000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0500	.0250	.1000	5.000	.0150	.0400
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0150	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	-.0014	.0212	.0008	.0873	.0000	-.0003
SDev	.0015	.0014	.0209	.0001	.0114	.0005	.0003
%RSD	170.0	98.12	98.47	16.03	13.00	2094.	87.02
#1	-.0002	-.0004	.0064	.0007	.0793	-.0003	-.0005
#2	.0019	-.0024	.0360	.0009	.0954	.0004	-.0001
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			5.000	.0100	5.000		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043	-.0000	-.0000	-.0007	-.0002	.0002	-.0042
SDev	.0030	.0003	.0003	.0005	.0003	.0001	.0022
%RSD	68.78	1961.	589.7	67.70	175.5	35.07	52.29
#1	.0022	.0002	.0001	-.0004	-.0004	.0001	-.0026
#2	.0064	-.0002	-.0002	-.0010	.0000	.0002	-.0057
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	.0100	.0500	.0200	.0030	.0050		
Low	-.0100	-.0500	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0082

Units	ppm	ppm	ppm	ppm	ppm
Avg	.0190	.0001	.0003	.0002	.0005
SDev	.0249	.0000	.0014	.0001	.0000
%RSD	131.6	.0000	512.0	39.74	.0000

#1	.0013	.0001	.0012	.0002	.0005
#2	.0366	.0001	-.0007	.0001	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avg	1934	--	--	--	--	--	--
SDev	77.35750	--	--	--	--	--	--
%RSD	3.999250	--	--	--	--	--	--

#1	1880	--	--	--	--	--	--
#2	1989	--	--	--	--	--	--

Analysis Report

01/17/01 06:43:28 PM

page 1

Method: NEW Sample Name: 11545.3

Operator: JAC

Run Time: 01/17/01 18:35:32

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Ave	.2319	.0032	-.0001	.1620	.0001	.0011	91.18
SDev	.0007	.0003	.0057	.0019	.0002	.0000	2.94
%RSD	.2831	9.189	4110.	1.174	203.5	.2536	3.221
#1	.2314	.0030	.0039	.1634	.0002	.0011	89.10
#2	.2324	.0034	-.0042	.1607	-.0000	.0011	93.25
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Ave	.0013	-.0009	.5521	3.499	18.36	.1115	.0545
SDev	.0005	.0004	.0171	.022	.02	.0013	.0004
%RSD	37.01	46.92	3.102	.6218	.1167	1.170	.6618
#1	.0016	-.0006	.5400	3.483	18.37	.1106	.0547
#2	.0009	-.0012	.5642	3.514	18.34	.1124	.0542
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Ave	.0387	.0324	3.898	.0009	64.12	-.0021	.0061
SDev	.0019	.0006	.040	.0001	1.15	.0055	.0066
%RSD	4.805	1.925	1.026	5.805	1.797	266.6	106.6
#1	.0374	.0319	3.927	.0010	63.31	-.0060	.0015
#2	.0400	.0328	3.870	.0009	64.94	.0018	.0108
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Ave	-.0010	.0002	.1326	.0345	.0034	.0808	4.730
SDev	.0005	.0000	.0007	.0010	.0062	.0008	.118
%RSD	45.82	3.066	.5593	3.002	181.9	.9296	2.499
#1	-.0013	.0002	.1320	.0337	-.0010	.0813	4.646
#2	-.0007	.0002	.1331	.0352	.0078	.0803	4.814
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0084

bits	ppm	ppm	ppm	ppm	ppm
Avge	.0366	.0001	.0032	.1561	.0005
SDev	.0000	.0000	.0006	.0015	.0000
%RSD	.0000	.0000	19.36	.9592	.0000
#1	.0366	.0001	.0028	.1572	.0005
#2	.0366	.0001	.0037	.1551	.0005
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Navlen	371.030	--	--	--	--	--	--
Avge	1722	--	--	--	--	--	--
SDev	26.87006	--	--	--	--	--	--
RSD	1.560308	--	--	--	--	--	--
#1	1703	--	--	--	--	--	--
#2	1741	--	--	--	--	--	--

Analysis Report

01/17/01 06:51:27 PM

page 1

Method: NEW

Sample Name: 11545.4

Operator: JAC

Time: 01/17/01 18:43:31

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0555	.0005	.0015	.2597	.0001	.0006	139.8
SDev	.0036	.0002	.0037	.0062	.0000	.0001	2.0
%RSD	6.507	46.71	246.7	2.392	31.05	19.56	1.404
#1	.0580	.0007	.0042	.2641	.0001	.0005	141.2
#2	.0529	.0003	-.0011	.2553	.0001	.0007	138.4
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0013	-.0009	.0565	1.046	26.43	1.678	.0014
SDev	.0005	.0004	.0015	.030	.64	.015	.0002
%RSD	37.79	46.88	2.581	2.836	2.406	.8896	11.45
#1	.0016	-.0012	.0575	1.067	26.88	1.667	.0013
#2	.0009	-.0006	.0554	1.025	25.98	1.689	.0015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0095	.0027	7.358	.0008	57.73	-.0045	.0016
SDev	.0018	.0011	.264	.0001	2.27	.0003	.0066
%RSD	19.19	40.79	3.583	6.117	3.928	7.042	407.9
#1	.0108	.0035	7.545	.0008	59.34	-.0043	-.0030
#2	.0082	.0019	7.172	.0009	56.13	-.0048	.0062
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0037	-.0000	.0185	.0050	-.0004	.1441	6.249
SDev	.0006	.0003	.0003	.0013	.0043	.0017	.128
%RSD	16.31	10180.	1.578	27.03	966.7	1.172	2.045
#1	-.0033	-.0002	.0183	.0059	-.0035	.1453	6.339
#2	-.0042	.0002	.0187	.0040	.0026	.1429	6.159
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0086

Units	ppm	ppm	ppm	ppm	ppm
Avge	.0553	.0001	.0021	.3543	.0005
SDev	.0264	.0000	.0001	.0050	.0000
%RSD	47.75	.0000	6.353	1.397	.0000
#1	.0366	.0001	.0022	.3578	.0005
#2	.0739	.0001	.0020	.3508	.0005

Errors High
Low
NOCHECK NOCHECK NOCHECK NOCHECK NOCHECK NOCHECK

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1742	--	--	--	--	--	--
SDev	49.56817	--	--	--	--	--	--
%RSD	2.844740	--	--	--	--	--	--
#1	1707	--	--	--	--	--	--
#2	1778	--	--	--	--	--	--

Analysis Report

01/17/01 06:59:25 PM

page 1

Method: NEW

Sample Name: 11545.5

Operator: JAC

R Time: 01/17/01 18:51:30

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0597	.0003	-.0006	.2749	.0001	.0004	149.4
SDev	.0006	.0021	.0014	.0042	.0001	.0001	1.8
%RSD	1.093	722.2	238.1	1.533	86.22	20.98	1.224

#1	.0592	.0017	.0004	.2779	.0000	.0003	150.7
#2	.0601	-.0012	-.0016	.2719	.0001	.0005	148.1

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	500.0	100.0	50.00	20.00	5.000	10.00	300.0
Low	-.2000	-.0600	-.0100	-.0100	-.0050	-.0050	-5.000

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	-.0006	.0917	.6086	28.22	1.796	.0021
SDev	.0009	.0002	.0028	.0152	.08	.019	.0006
%RSD	96.87	37.51	3.037	2.500	.2945	1.032	27.67

#1	.0003	-.0008	.0937	.5978	28.28	1.783	.0026
#2	.0016	-.0005	.0898	.6193	28.17	1.809	.0017

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	20.00	100.0	100.0	500.0	300.0	10.00	20.00
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0100	-.0400

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0116	.0056	7.873	.0009	61.91	-.0039	.0096
SDev	.0013	.0017	.019	.0000	1.11	.0036	.0101
%RSD	10.95	29.60	.2460	.0091	1.789	91.14	104.9

#1	.0125	.0044	7.859	.0009	62.69	-.0014	.0168
#2	.0107	.0068	7.886	.0009	61.12	-.0065	.0025

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			200.0	2.000	200.0		
Low			-5.000	-.0100	-5.000		

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	-.0002	.0222	.0076	.0051	.1664	6.671
SDev	.0016	.0006	.0000	.0007	.0079	.0020	.060
%RSD	229.7	293.1	.1074	9.037	155.1	1.199	.9005

#1	.0004	-.0006	.0222	.0071	.0107	.1650	6.713
#2	-.0018	.0002	.0222	.0081	-.0005	.1678	6.628

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	20.00	50.00	10.00	100.0	20.00		
Low	-.0100	-.0100	-.0200	-.0030	-.0050		

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349
------	--------	--------	--------	--------	--------

0088

	its	ppm	ppm	ppm	ppm	ppm
Avge		.0366	.0001	.0021	.3746	.0005
SDev		.0000	.0000	.0005	.0024	.0000
%RSD		.0000	.0000	22.75	.6272	.0000
#1		.0366	.0001	.0018	.3763	.0005
#2		.0366	.0001	.0025	.3729	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High					
Low					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1689	--	--	--	--	--	--
SDev	1.767767	--	--	--	--	--	--
%RSD	.1046666	--	--	--	--	--	--
#1	1688	--	--	--	--	--	--
#2	1690	--	--	--	--	--	--

Analysis Report

Blank Sample

01/17/01 07:07:24 PM

page 1

Method: NEW

Sample Name: CRI

Operator: JAC

Run Time: 01/17/01 18:59:28

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2278	.1132	.0245	.0214	.0108	.0109	.2404
SDev	.0064	.0003	.0040	.0003	.0001	.0002	.0260
%RSD	2.806	.2360	16.52	1.353	.5661	1.893	10.80

#1	.2324	.1130	.0274	.0216	.0109	.0111	.2588
#2	.2233	.1133	.0216	.0211	.0108	.0108	.2221

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0222	.1022	.0536	.1179	.2152	.0318	.0854
SDev	.0005	.0012	.0008	.0018	.0080	.0004	.0001
%RSD	2.172	1.216	1.516	1.559	3.712	1.159	.1725

#1	.0218	.1014	.0530	.1166	.2208	.0320	.0853
#2	.0225	.1031	.0542	.1192	.2095	.0315	.0856

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0075	.0033	.4833	.0191	.5466	.0082	.0065
SDev	.0017	.0018	.0190	.0004	.1105	.0025	.0043
%RSD	22.82	56.31	3.922	2.027	20.22	30.84	66.76

#1	.0063	.0046	.4699	.0188	.4684	.0064	.0034
#2	.0087	.0020	.4967	.0194	.6247	.0100	.0096

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0167	.1061	.0413	.0047	.0071	.0723	.4761
SDev	.0014	.0018	.0001	.0007	.0037	.0002	.0140
%RSD	8.334	1.665	.2127	14.11	52.85	.2628	2.939

#1	.0157	.1073	.0412	.0051	.0044	.0724	.4860
#2	.0177	.1048	.0414	.0042	.0097	.0721	.4662

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349
Units	ppm	ppm	ppm	ppm	ppm
Avge	-.0005	.0001	.0221	.0107	.0005
SDev	.0001	.0000	.0008	.0000	.0000
%RSD	14.74	.0000	3.517	.1233	.0000

#1	-.0005	.0001	.0226	.0107	.0005
#2	-.0006	.0001	.0215	.0107	.0005

0090

tStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1787	--	--	--	--	--	--
SDev	3.747701	--	--	--	--	--	--
%RSD	.2097730	--	--	--	--	--	--
#1	1789	--	--	--	--	--	--
#2	1784	--	--	--	--	--	--

Method: NEW

Sample Name: ICSA

Operator: JAC

Run Time: 01/17/01 19:07:27

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	249.5	-.0007	-.0085	.0005	.0000	.0154	248.1
SDev	13.7	.0014	.0058	.0000	.0001	.0004	7.6
%RSD	5.505	190.2	67.76	2.323	282.1	2.490	3.058

#1	239.8	.0003	-.0126	.0006	-.0000	.0151	242.7
#2	259.3	-.0018	-.0044	.0005	.0001	.0157	253.5

Errors	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value	250.0						250.0
Range	20.00						20.00

Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0045	.0009	.0031	102.3	271.6	.0012	.0003
SDev	.0007	.0006	.0003	5.8	11.6	.0000	.0004
%RSD	15.21	61.11	9.002	5.635	4.279	.9725	150.8

#1	.0040	.0013	.0033	98.23	263.4	.0012	-.0000
#2	.0050	.0005	.0029	106.4	279.8	.0012	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK	NOCHECK
Value				100.0	250.0		
Range				20.00	20.00		

Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0514	-.0213	.0320	.0009	.1707	-.0130	-.0530
SDev	.0040	.0032	.0033	.0001	.1050	.0016	.0021
%RSD	7.822	15.01	10.32	15.30	61.54	12.14	3.893

#1	.0485	-.0190	.0343	.0008	.2450	-.0141	-.0544
#2	.0542	-.0235	.0296	.0010	.0964	-.0119	-.0515

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1038	.0008	-.0031	.0029	-.0396	.0034	.0398
SDev	.0110	.0002	.0013	.0008	.0019	.0002	.0086
%RSD	10.64	28.65	40.42	26.79	4.794	4.616	21.64

#1	.1116	.0010	-.0040	.0035	-.0410	.0033	.0337
#2	.0960	.0007	-.0022	.0024	-.0383	.0035	.0458

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349
------	--------	--------	--------	--------	--------

0092

its	ppm	ppm	ppm	ppm	ppm		
Avge	.0366	.0001	-.0032	-.0160	.0005		
SDev	.0000	.0000	.0009	.0011	.0000		
%RSD	.0000	.0000	27.89	6.808	.0000		
#1	.0366	.0001	-.0026	-.0153	.0005		
#2	.0366	.0001	-.0039	-.0168	.0005		
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK		
Value							
Range							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mem	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avge	1722	--	--	--	--	--	--
SDev	94.25737	--	--	--	--	--	--
RSD	5.472920	--	--	--	--	--	--
#1	1789	--	--	--	--	--	--
#2	1656	--	--	--	--	--	--

Analysis Report

QC Standard

01/17/01 07:23:20 PM

page 1

Method: NEW

Sample Name: ICSAB

Operator: JAC

Time: 01/17/01 19:15:25

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	246.5	.4759	.5577	.2653	.2506	.5078	246.3
SDev	1.5	.0119	.0112	.0014	.0027	.0015	4.8
%RSD	.6134	2.495	2.017	.5233	1.068	.2962	1.969
#1	247.6	.4675	.5498	.2663	.2525	.5089	249.7
#2	245.5	.4843	.5657	.2643	.2487	.5068	242.8
Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.0			.2500	.2500	.5000	250.0
Range	20.00			20.00	20.00	20.00	20.00
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2425	.2530	.2731	100.3	268.9	.2532	.4982
SDev	.0048	.0013	.0066	1.6	4.5	.0008	.0005
%RSD	1.997	.5021	2.407	1.615	1.680	.3070	.1060
#1	.2391	.2539	.2777	101.4	265.7	.2537	.4986
#2	.2460	.2521	.2684	99.12	272.1	.2526	.4978
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.2500	.2500	.2500	100.0	250.0	.2500	.5000
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5702	.5084	.0250	.4869	.0758	1.129	.9125
SDev	.0164	.0174	.0066	.0092	.1195	.058	.0420
%RSD	2.885	3.415	26.38	1.890	157.7	5.103	4.599
#1	.5586	.5207	.0203	.4934	-.0087	1.088	.8829
#2	.5818	.4961	.0296	.4804	.1602	1.170	.9422
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value				.5000			
Range				20.00			
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5479	.2517	.4612	.5290	.9847	.4992	2.010
SDev	.0015	.0013	.0056	.0061	.0472	.0018	.028
%RSD	.2834	.5168	1.203	1.152	4.792	.3506	1.377
#1	.5468	.2508	.4651	.5333	.9514	.4980	1.990
#2	.5490	.2526	.4573	.5247	1.018	.5005	2.029
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value		.2500	.5000	.5000			
Range		20.00	20.00	20.00			
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0094

	its	ppm	ppm	ppm	ppm	ppm
Avge		.0743	.0001	.5075	.5071	.0005
SDev		.0001	.0000	.0060	.0070	.0000
%RSD		.0877	.0000	1.179	1.381	.0000

#1	.0743	.0001	.5117	.5021	.0005
#2	.0743	.0001	.5033	.5120	.0005

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value					
Range					

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1759	--	--	--	--	--	--
SDev	3.040507	--	--	--	--	--	--
%RSD	.1728101	--	--	--	--	--	--
#1	1762	--	--	--	--	--	--
#2	1757	--	--	--	--	--	--

0095

Analysis Report

QC Standard

01/17/01 07:31:18 PM

page 1

Method: NEW

Sample Name: CCV

Operator: JAC

R. Time: 01/17/01 19:23:23

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.169	.5042	Q.5558	.5122	.5286	.5165	25.92
SDev	.023	.0108	.0058	.0032	.0031	.0007	.08
%RSD	.4463	2.136	1.042	.6163	.5811	.1320	.3202
#1	5.186	.4966	Q.5517	.5099	.5307	.5170	25.98
#2	5.153	.5119	Q.5599	.5144	.5264	.5160	25.87
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value	5.000	.5000	.5000	.5000	.5000	.5000	25.00
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5483	.5071	.5312	5.301	25.55	.5326	Q.6022
SDev	.0021	.0018	.0012	.074	.18	.0022	.0114
%RSD	.3804	.3533	.2243	1.398	.6895	.4097	1.899
#1	.5498	.5083	.5321	5.248	25.67	.5310	Q.5941
#2	.5468	.5058	.5304	5.353	25.43	.5341	Q.6102
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail
Value	.5000	.5000	.5000	5.000	25.00	.5000	.5000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5182	.5319	25.88	.4900	51.63	.5589	.4732
SDev	.0061	.0008	.36	.0084	.92	.0048	.0023
%RSD	1.174	.1580	1.381	1.706	1.788	.8656	.4945
#1	.5225	.5313	25.62	.4841	50.97	.5555	.4715
#2	.5139	.5325	26.13	.4959	52.28	.5623	.4748
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK
Value			25.00	.5000	50.00		
Range			10.00	10.00	10.00		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4811	.5227	.4931	.5273	.5017	.4830	5.078
SDev	.0011	.0035	.0109	.0015	.0032	.0170	.006
%RSD	.2307	.6708	2.207	.2782	.6323	3.518	.1185
#1	.4819	.5252	.5008	.5284	.4995	.4710	5.083
#2	.4803	.5203	.4854	.5263	.5040	.4950	5.074
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5000	.5000	.5000	.5000	.5000	.5000	5.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0096

	bits	ppm	ppm	ppm	ppm	ppm
Avge		Q.0545	Q.0001	.5134	.5213	Q.0005
SDev		.0253	.0000	.0044	.0082	.0000
%RSD		46.43	.0000	.8506	1.575	.0000

#1	Q.0724	Q.0001	.5103	.5155	Q.0005
#2	Q.0366	Q.0001	.5165	.5271	Q.0005

Errors	QC Fail	QC Fail	QC Pass	QC Pass	QC Fail
Value	.5000	.5000	.5000	.5000	5.000
Range	10.00	10.00	10.00	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	1832	--	--	--	--	--	--
SDev	31.39556	--	--	--	--	--	--
%RSD	1.714012	--	--	--	--	--	--
#1	1854	--	--	--	--	--	--
#2	1810	--	--	--	--	--	--

Analysis Report

01/17/01 07:39:17 PM

page 1

Method: NEW

Sample Name: CCB

Operator: JAC

Run Time: 01/17/01 19:31:21

Comment:

Mode: CONC Corr. Factor: 1

Elem	Al3082	Sb2068	As1890	Ba4934	Be3130	Cd2265	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0083	.0042	-.0008	.0002	.0000	.0003	.0058
SDev	.0054	.0009	.0045	.0001	.0000	.0001	.0148
%RSD	65.22	22.78	549.5	25.79	61.27	32.75	256.4
#1	.0122	.0035	.0023	.0002	.0000	.0004	.0162
#2	.0045	.0048	-.0040	.0002	.0000	.0002	-.0047
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.2000	.0600	.0100	.2000	.0050	.0050	5.000
Low	-.2000	-.0600	-.0100	-.2000	-.0050	-.0050	-5.000
Elem	Cr2677	Co2286	Cu3247	Fe2714	Mg2790	Mn2576	Ni2316
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0007	-.0016	.0072	.0144	.0002	.0007
SDev	.0004	.0001	.0006	.0021	.0093	.0001	.0004
%RSD	68.05	7.585	36.42	28.34	64.45	30.60	68.45
#1	.0003	.0006	-.0012	.0087	.0210	.0002	.0003
#2	.0009	.0007	-.0020	.0058	.0079	.0001	.0010
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.0100	.0500	.0250	.1000	5.000	.0150	.0400
Low	-.0100	-.0500	-.0250	-.1000	-5.000	-.0150	-.0400
Elem	2203/1	2203/2	K_7664	Ag3280	Na3302	1960/1	1960/2
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	-.0018	.0108	.0007	.1343	.0042	.0040
SDev	.0000	.0008	.0313	.0003	.0254	.0064	.0010
%RSD	2.620	47.04	290.9	41.58	18.91	153.4	25.27
#1	.0013	-.0024	-.0114	.0005	.1164	.0087	.0047
#2	.0013	-.0012	.0329	.0008	.1523	-.0004	.0033
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High			5.000	.0100	5.000		
Low			-5.000	-.0100	-5.000		
Elem	Tl1908	V_2924	Zn2062	Pb2203	Se1960	B_2496	Si2881
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	.0003	.0001	-.0008	.0041	.0005	-.0079
SDev	.0004	.0003	.0005	.0005	.0028	.0002	.0021
%RSD	23.09	74.33	434.2	72.41	69.40	35.43	26.16
#1	.0018	.0002	.0005	-.0011	H.0060	.0004	-.0065
#2	.0013	.0005	-.0002	-.0004	.0021	.0006	-.0094
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK
High	.0100	.0500	.0200	.0030	.0050		
Low	-.0100	-.0500	-.0200	-.0030	-.0050		
Elem	Ga4172	Sn1899	Mo2020	Sr4215	Ti3349		

0098

its	ppm	ppm	ppm	ppm	ppm		
Avge	.0199	.0001	.0008	.0001	.0005		
SDev	.0237	.0000	.0001	.0001	.0000		
%RSD	119.2	.0000	11.13	51.94	.0000		
#1	.0366	.0001	.0008	.0002	.0005		
#2	.0031	.0001	.0007	.0001	.0005		
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK		
High							
Low							
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mem	Y	--	--	--	--	--	--
Avlen	371.030	--	--	--	--	--	--
Avge	1970	--	--	--	--	--	--
SDev	15.69774	--	--	--	--	--	--
RSD	.7966372	--	--	--	--	--	--
#1	1959	--	--	--	--	--	--
#2	1982	--	--	--	--	--	--

Mercury Log

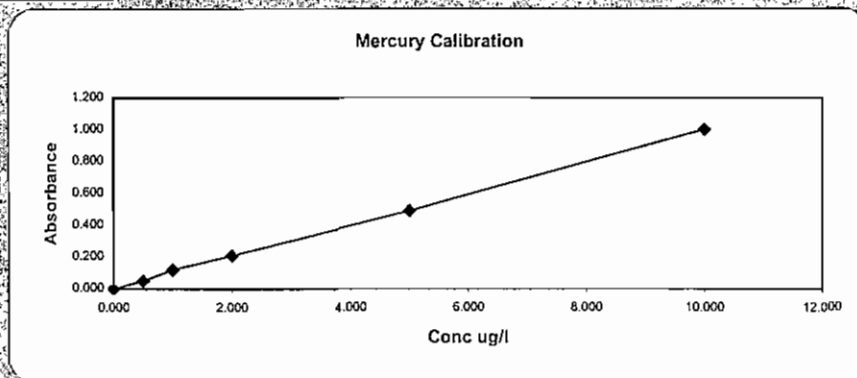
Date	1/17/01
Analyst	MJP
Start Time	12:30
End Time	13:16

Method: 7470 - waters ; 7471 - solids.

Detection Limit = <0.0002 mg/l

STANDARD CURVE

Std. #	ug/l	Abs.
Blank	0.000	0.000
	0.500	0.050
	1.000	0.120
	2.000	0.210
	5.000	0.490
	10.000	1.000
Slope	0.099	
Intercept	0.006	
Correlation	1.000	



Sample ID	Job #	Client	Abs.	Initial Volume (ml.)	Final Volume (ml.)	Weight for Solids (grams)	Percent Solids	DIL	Sample Conc. (ug/l)	Sample Conc. (mg/l)	Sample Conc. (mg/kg)	Conc. (mg/kg) Dry
3.0 ppm	QC		0.302	100	100			1.0	2.986	0.00299		
Blk			0.000	100	100			1.0	<0.2	<0.0002		
CRA			0.030	100	100			1.0	0.239	0.00024		
Prep Blk			0.000	100	100			1.0	<0.2	<0.0002		
Prep Lcsw			0.291	100	100			1.0	2.875	0.00287		
1	11538--1	Express Lab	0.005	10	100			10.0	<0.2	<0.0002		
2	11538--2	Express Lab	0.000	100	100			1.0	<0.2	<0.0002		
3	11541--1	Express Lab	0.000	100	100			1.0	<0.2	<0.0002		
4	11541--2	Express Lab	0.000	100	100			1.0	<0.2	<0.0002		
5	11545--2	Express Lab	0.000	100	100			1.0	<0.2	<0.0002		
6	11545--3	Express Lab	0.000	100	100			1.0	<0.2	<0.0002		
3.0 ppm	QC		0.314	100	100			1.0	3.107	0.00311		
Blk			0.000	100	100			1.0	<0.2	<0.0002		

0100

Mercury Log

7	11545--1		Express Lab	0.000	100	100			1.0	<0.2	<0.0002		
8	dup		Express Lab	0.000	100	100			1.0	<0.2	<0.0002		
9	spk		Express Lab	0.100	100	100			1.0	0.946	0.00095		
	3.0 ppm	QC		0.320	100	100			1.0	3.167	0.00317		
	blk			0.000	100	100			1.0	<0.2	<0.0002		
10													

0101

Metal's Digestion Log

Date: 1/17/01

Time: 9:00am

Analyst: GGS

Matrix: WATER

Digestion Method: EPA 3010A

Eppendorfs used: M EP 4

[illegible]

Color:

Red

Green

White

Grey

Blue

Orange

Colorless

Black

Yellow

Violet

Brown

Purple

Clarity:

Clear

Cloudy

Opaque

Texture:

Fine (powdery)

Medium (sand)

Coarse (crystals or large rocks)

Lot #'s:

Spike sol: D021699A

Conc. HCl: -

Conc. HNO₃: M109-14

1:1 HCl: D092898A

1:1 HNO₃: -

Hydrogen peroxid	-
------------------	---

0102

Mercury Digestion Log

Date: 1/16/01

Tech: MJP

Start Time: 1:00 PM

End Time: 4:00 PM

	Client	Sample #	Job #	Sample Amount	Type
1	Express Lab	11538--1		10 ml	Hg
2	Express Lab	11538--2		100 ml	Hg
3	Express Lab	11545--1		100 ml	Hg
4	Express Lab	Dup		100 ml	Hg
5	Express Lab	Spk		100 ml	Hg
6	Express Lab	11545--2		100 ml	Hg
7	Express Lab	11545--3		100 ml	Hg
8	Express Lab	11541--1		100 ml	Hg
9	Express Lab	11541--2		100 ml	Hg
10		Blk		100 ml	Hg
11		LCSW		100 ml	Hg
12					
13					
14					
15					
16					
17					
18					
19					
20					

0103

P.O. Box 40, 5611 Water Street, Middlesex, NY 14507

NY #11369 NJ #73744 CA #2055 SC #91011

Phone #: 800-843-5227

Fax #: 716-554-4114

"Specializing in Environmental Soil Tests"

Customer: Pagan Engineers

Address:

City/State/Zip:

Phone: () -

Fax: () -

Contact: Steve D.

Date Due: 1/18/01

☐ Standard Service

☐ Rush Service

PO No.: 1997.150

Project No.:

Project Cust.:

Project Site:

Spill No.:

Pin No.:

Sample Demographics and Parameters for Analysis

Special Instructions:

ASP/CLP Protocol
Cal B deliverables
5 day turnaround as discussed.

Suspect Ingredient: ☐ Diesel

☐ Gasoline

☐ Oil

Parameters for Analysis

Date	Time	Sample Description & Location	MATRIX			TAL Metals				
			Aqueous	Soil	Other					
1/11/01	1130	ALFMW010112001	✓			✓				
1/11/01	1205	ALFMW20112001	✓			✓				
1/11/01	1245	ALFMW30112001	✓			✓				
1/11/01	1205	ALFMW2M50112001	✓			✓				
1/11/01	1205	ALFMW2MSD0112001	✓			✓				

Chain of Custody Record

of Samples: 3

of Containers: 5

Sampler: S. Degerdon

Signature: [Signature]

Samples Sent By: ☐ ExpressMail

☒ Hand Delivery

Custody Seal Intact? ☒ Yes

☐ No

☐ N/A

Shipment Complete? ☒ Yes

☐ No

☐ N/A

Temperature: 4°C Fahrenheit

SAMPLES RELINQUISHED BY

SAMPLES RECEIVED BY

Name & Signature	Date & Time	Name & Signature	Date & Time
S. Degerdon	1-12-01 8AM	Annabelle Burkholder	1-17-01 3:35PM

Received for Laboratory By:

[Signature]

1-16-01 10:30

"Results when YOU want them!"

0105

Affix Leader LabelORIGINAL
FORM

Dr. Bassett

8-110-013

Kristen

116



LOZIER LABORATORIES, INC.

909 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 654-6350
FAX (716) 654-6354

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: Fagan Engineers
113 E. Chemung Place
Elmira, NY 14904

Date Received: 1/16/01
Laboratory No.: 11545
Report Date: 1/18/01

Attn: Steve Degerdon
Client PO Number: 1997.150

SAMPLE INFORMATION

Sample Date: 1/11/01
Sampler: Client

Matrix: Aqueous

LABORATORY REPORT

Lozier Sample ID:		11545--1	11545--2		
ExpressLab Sample ID:		40195	40196		
Fagan Eng. Sample ID:		ACFMW 101112001	ACFMW 201112001		
PARAMETER				Units	Method Number
Aluminum	0.105	0.071	mg/l	EPA 6010B	1/17/01
Antimony	0.003	<0.003	mg/l	EPA 6010B	1/17/01
Arsenic	<0.005	<0.005	mg/l	EPA 6010B	1/17/01
Barium	0.160	0.220	mg/l	EPA 6010B	1/17/01
Beryllium	<0.001	<0.001	mg/l	EPA 6010B	1/17/01
Cadmium	<0.001	<0.001	mg/l	EPA 6010B	1/17/01
Calcium	88.4	122	mg/l	EPA 6010B	1/17/01
Chromium	<0.003	<0.003	mg/l	EPA 6010B	1/17/01
Cobalt	<0.003	<0.003	mg/l	EPA 6010B	1/17/01
Copper	0.084	0.064	mg/l	EPA 6010B	1/17/01
Iron	0.093	0.503	mg/l	EPA 6010B	1/17/01
Lead	0.011	0.004	mg/l	EPA 6010B	1/17/01
Magnesium	17.0	22.4	mg/l	EPA 6010B	1/17/01
Manganese	0.007	1.41	mg/l	EPA 6010B	1/17/01
Mercury	<0.0002	<0.0002	mg/l	EPA 7470	1/17/01
Nickel	0.003	<0.003	mg/l	EPA 6010B	1/17/01
Potassium	4.89	6.05	mg/l	EPA 6010B	1/17/01
Selenium	<0.005	<0.005	mg/l	EPA 6010B	1/17/01
Silver	<0.005	<0.005	mg/l	EPA 6010B	1/17/01
Sodium	112	48.2	mg/l	EPA 6010B	1/17/01
Thallium	<0.010	<0.010	mg/l	EPA 6010B	1/17/01
Vanadium	<0.003	<0.003	mg/l	EPA 6010B	1/17/01
Zinc	0.024	0.019	mg/l	EPA 6010B	1/17/01

PAGE: 1

0106

James A. Boush
Approved By: _____



LOZIER LABORATORIES, INC.

909 CULVER ROAD
ROCHESTER, NEW YORK 14609
TEL (716) 654-6350
FAX (716) 654-6354

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY
10390

Client: Fagan Engineers
113 E. Chemung Place
Elmira, NY 14904

Date Received: 1/16/01
Laboratory No.: 11545
Report Date: 1/18/01

Attn: Steve Degerdon
Client PO Number: 1997.150

SAMPLE INFORMATION

Sample Date: 1/11/01
Sampler: Client

Matrix: Aqueous

LABORATORY REPORT

Lozier Sample ID: 11545--3
ExpressLab Sample ID: 40197
Fagan Eng. Sample ID: ACFMW 301112001

PARAMETER		Units	Method Number	Analysis Date
Aluminum	0.232	mg/l	EPA 6010B	1/17/01
Antimony	0.003	mg/l	EPA 6010B	1/17/01
Arsenic	<0.005	mg/l	EPA 6010B	1/17/01
Barium	0.162	mg/l	EPA 6010B	1/17/01
Beryllium	<0.001	mg/l	EPA 6010B	1/17/01
Cadmium	0.001	mg/l	EPA 6010B	1/17/01
Calcium	91.2	mg/l	EPA 6010B	1/17/01
Chromium	<0.003	mg/l	EPA 6010B	1/17/01
Cobalt	<0.003	mg/l	EPA 6010B	1/17/01
Copper	0.552	mg/l	EPA 6010B	1/17/01
Iron	3.50	mg/l	EPA 6010B	1/17/01
Lead	0.035	mg/l	EPA 6010B	1/17/01
Magnesium	18.4	mg/l	EPA 6010B	1/17/01
Manganese	0.112	mg/l	EPA 6010B	1/17/01
Mercury	<0.0002	mg/l	EPA 7470	1/17/01
Nickel	0.055	mg/l	EPA 6010B	1/17/01
Potassium	3.90	mg/l	EPA 6010B	1/17/01
Selenium	<0.005	mg/l	EPA 6010B	1/17/01
Silver	<0.005	mg/l	EPA 6010B	1/17/01
Sodium	64.1	mg/l	EPA 6010B	1/17/01
Thallium	<0.010	mg/l	EPA 6010B	1/17/01
Vanadium	<0.003	mg/l	EPA 6010B	1/17/01
Zinc	0.133	mg/l	EPA 6010B	1/17/01

PAGE: 2

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James A. Brown
APPROVED

