Environmental Resources Management

ERM
5788 Widewaters Parkway
Dewitt, NY 13210

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315/445-2543 (fax)

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VIA email: rjwhitch@gw.dec.state.ny.us

19 January 2011

NYSDEC - Division of Environmental Remediation
Attn: Mr. Randy Whitcher
Remedial Bureau C - 11th Floor
625 Broadway
Albany, NY 12233-7014

Re: December 2010 Quarterly Ground Water Monitoring Report
Former Banknote Facility
10 Dunnigan Drive
Town of Ramapo, Rockland County New York
NYSDEC BCP Number: C344047
ERM Project No. 0125992

Dear Mr. Whitcher:

On behalf of Manhattan Beer Distributors (present Site Owner), Environmental Resources Management, Inc. (ERM) has completed the preparation of the December 2010 Quarterly Ground Water Monitoring Report for the subject site. Attached, as requested is one electronic copy for your review and comment and your requested site update information from Manhattan Beer Distributors.

Please feel free to contact me at dave.myers@erm.com or on my mobile phone (518-461-8936) if you have any questions or comments.

Very truly yours,

David W. Myers, C.G.
Senior Project Manager

Attachment:

Cc: Mr. Mike McCarthy Manhattan Beer Distributors

December 2010 Quarterly Ground Water Monitoring Report

Former Banknote Facility
10 Dunnigan Drive
Town of Ramapo,
Rockland County, New York
Brownfield Cleanup Program
NYSDEC BCP Number: C344047

January 2011

ERM Project Number: 0125992

Prepared for:

Manhattan Beer Distributors
400 Walnut Avenue
Bronx, New York 10454

Prepared by:

Environmental Resources Management, Inc.
5788 Widewaters Parkway
Dewitt, New York 13214

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1.0 INTRODUCTION

On behalf of Manhattan Beer Distributors (Manhattan), Environmental Resources Management (ERM) prepared this Quarterly Ground Water Monitoring Report (Report) to document the December 2010 ground water sampling activities at the Former Banknote Facility. The Former Banknote Facility is a 10-acre parcel of land with buildings located at 10 Dunnigan Drive, Town of Ramapo, Rockland County, New York (the "Site"). A Site Location Map is presented on Figure 1, Attachment A.

Ground water sampling was conducted in accordance with a Brownfield Cleanup Agreement (BCA) with an effective date of 4 June 2004, between Baker Properties, Inc. (Baker) of Pleasantville, New York (the previous Site Owners) and the New York State Department of Environmental Conservation (NYSDEC), BCA Index No.: A3-0424-0007; Site No. C00359-3, and in accordance with the following technical documents:

- NYSDEC-approved "*Remedial Action Work Plan (RAWP)*", under the Voluntary Cleanup Program (VCP); NYSDEC VCP No.: V-00359, Revised December, 2003 (ERM);

- NYSDEC-approved "*Health and Safety Plan*", dated January 2004 (ERM);

- NYSDEC-approved "*Quality Assurance Project Plan*", dated October 2003 (ERM); and

- NYSDEC-approved letter dated 29 April 2004 (ERM), which responded to general comments from the public hearing.

As part of the RAWP, ERM sampled the following ground water monitoring wells MW-1, MW-2, MW-3 MW-4, DW-1, MW-5 MW-6 MW-7, MW-8 and MW-10 for total chromium on a quarterly basis for five quarters and every fifth quarter for five years thereafter. ERM re-evaluated the data after the first three rounds of sampling and in a correspondence dated 12 September 2005, the NYSDEC agreed to remove monitoring wells MW-2, MW-3, MW-7, MW-10 and DW-1 from the sample schedule because the chromium concentrations in the samples collected from these monitoring wells were consistently below the reporting limit for chromium.

Monitoring well MW-1 was destroyed during a parking lot renovation, and is therefore no longer sampled.

2.0 GROUND WATER SAMPLING

Pursuant to the NYSDEC-approved monitoring plan, ERM collected ground water samples at the site during the following months:

- December 2004,
- March 2005,
- June 2005,
- September 2005,
- December 2005,
- March 2007,
- May 2008,
- September 2009, and
- December 2010.

On 30 November 2010, ERM collected the quarterly ground water samples from monitoring wells MW-4, MW-5, MW-6, and MW-8 at the west end of the site. A site layout map showing the locations of the ground water monitoring wells is included as Figure 2, Attachment A.

An ERM geologist collected static water level measurements from each of the wells using an electronic water level indicator, which was washed with a Liquinox™ solution, 10% nitric acid solution and rinsed with distilled water between measurement locations. The reference point used for all water level measurements was the top of the well casing.

The low-flow purging/sampling technique was implemented by ERM for each of the sampled wells, employing a flow-through cell, probe and meter to measure water quality parameters including temperature, pH, turbidity, specific conductivity, oxidation-reduction potential, and dissolved oxygen (DO) continuously at each well during purging. Samples were collected from each of the wells, once the ground water parameters stabilized for three consecutive readings in accordance with the U.S. Environmental Protection Agency Low Stress Purging and Sampling Procedure for Collection of Ground Water from Monitoring Wells, dated 30 July 1996. For quality control requirements a blind field duplicate was collected from MW-4.

All samples were transferred into clean, laboratory-supplied containers and placed into a chilled, thermally insulated cooler

immediately after collection. Federal Express delivered samples to the project laboratory within 24 hours of sample collection and chain of custody procedures were followed during all sample handling and transport.

Ground water samples collected on 30 November 2010 were analyzed by Spectrum Analytical, Inc. (Spectrum) in Agawam, Massachusetts. Spectrum is a New York State Department of Health (NYSDOH) approved environmental laboratory.

3.0 GROUND WATER ELEVATIONS

ERM collected ground water elevations for MW-2, MW-3 MW-4, MW-5, MW-6 MW-7, MW-8, and MW-10 during the 30 November 2010 sampling event (Table 1). A ground water contour map (Figure 3, Attachment A) was compiled using the water level data for the eight shallow monitoring wells.

The ground water contour map indicates that the flow direction of shallow ground water on 30 November 2010 was generally north-northwest consistent with earlier sampling events.

4.0 ANALYTICAL RESULTS

Ground water samples collected from the monitoring wells were analyzed for total chromium by United States Environmental Protection Agency 200/6000 Methods in accordance with the 1995 NYSDEC Analytical Services Protocol (ASP) Category B deliverable guidelines. A summary table including the results of previous sampling events is included as Table 2, Attachment B. Ground water sampling records are included in Attachment C. Laboratory analytical report is presented as Attachment D. A Data Usability Summary Report performed by ERM is presented as Attachment E.

Laboratory analytical data from the 30 November 2010 sampling event indicate that total chromium was detected above the NYSDEC ground water standard of 0.050 milligrams per liter (mg/l) in the ground water samples collected from monitoring well MW-4. There are slight fluctuations in concentrations in each of the four wells that were sampled, which are consistent with previous sampling efforts.

5.0 SUMMARY

The 30 November 2010 sampling event completes the fifth year of the ground water monitoring following the remedial action completed at the Site in 2004.

During the 30 November 2010 sampling event, ERM collected ground water samples from the following monitoring wells MW-4, MW-5, MW-6 and MW-8. Static ground water measurements indicate ground water flow at the Site was to the north-northwest which is consistent with previous sampling events. Analytical data from this sampling event and trends in total chromium concentrations from recent sampling events are discussed in detail below.

Data from the 30 November 2010 sampling event indicates that only one monitoring well (MW-4) contained total chromium at a concentration exceeding the NYSDEC Ground Water Standard. A review of the analytical data from previous sampling events indicated chromium concentrations in the ground water collected from MW-4 have shown slight fluctuations with no clear trend.

There has been a decreasing trend in total chromium concentration in ground water collected from MW-8 since December 2005. This sampling event marks the first monitoring period where total chromium concentration in MW-8 is under the applicable standard.

Total chromium concentrations in MW-6 have shown slight fluctuations, but have been below the applicable ground water standard since July 2002.

Total chromium concentrations in MW-5, have been below the applicable ground water standard since December 2004 and have consistently been below the laboratory's reporting limit since March 2007.

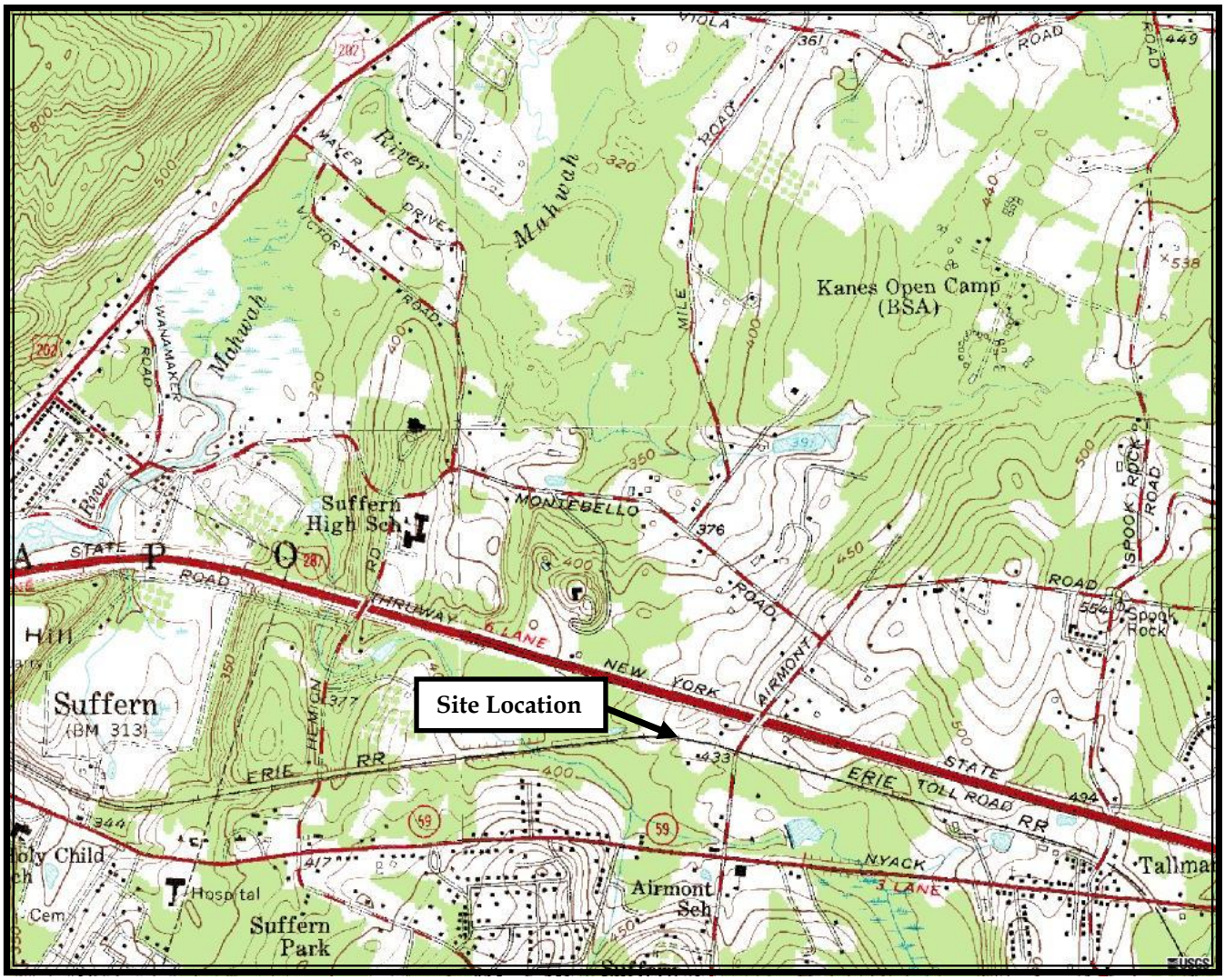
Two wells located within close proximity of the building (MW-4 and MW-8) had total chromium concentrations which exceeded the applicable NYSDEC ground water standard during this five year monitoring period. Ground water data indicates that total chromium concentration in ground water monitored proximal to the boundaries of the Site have been below applicable NYSDEC ground water standards since July 2002.

6.0 RECOMMENDATIONS

Due to the exceedance of the NYSDEC ground water standard in MW-4, ERM recommends a continuation of ground water monitoring at the Site every fifth quarter over the next 30 months. Sampling events will be completed during March 2012 and June 2013. ERM recommend removing MW-5 from the sampling schedule, as total chromium concentrations have remained well below the applicable standard. During future ground water sampling events ERM recommends sampling MW-4 and MW-8, and using MW-6 as a centennial monitoring point. Following each sampling event, ERM will prepare and submit a letter report discussing the analytical results. ERM will reevaluate Site conditions during the summer of 2013 and make recommendations based on the analytical data and statistical trends in chromium concentrations.

As required by the NYSDEC, a Site Management Periodic Review will be submitted on an annual basis.

APPENDIX A
FIGURES



Site Location Former Banknote Facility Suffern, New York		
Prepared For: Manhattan Beer Distributors		
ERM	Scale: As Shown Date: 14 Sept 09	Figure: 1

N

New York State Thruway

MW-6

MW-7

MW-10

MW-5

Stone Swale

Administrative Offices

DW-1

MW-4

Former Chromium Room

Loading Docks

MW-3

MW-8

Former Banknote Facility

MW-2

Parking Lot

Electrical Transformer

Parking Lot

Dunnigan Drive

Legend

Fence

MW-2 Monitoring Well

Site Layout
Former Banknote Facility
Suffern, New York

Prepared For:
Manhattan Beer Dsitributors

ERM

Scale
NTS

Date
14 Sept 09

Figure
2

N

344

New York State Thruway

MW-6
(344.71)

MW-7
(345.43)

346

MW-10
(346.06)

MW-5
(346.36)

348

350

MW-4
(350.98)

352

MW-3
(352.56)

Former
Chromium Room

Loading
Docks

MW-8
(353.74)

Former Banknote Facility

354

MW-2
(354.42)

Parking Lot

Parking Lot

Dunnigan Drive

Legend

Fence

MW-2 Monitoring Well

Ground Water Contour, Dashed Where Inferred

Ground Water Contour- 30 Nov. 2010
Former Banknote Facility
Suffern, New York

Prepared For: Manhattan Beer Distributors

ERM

Scale: NTS

Date: 1 Dec 2010

Figure: 3

APPENDIX B
TABLES

TABLE 1
SUMMARY OF MONITORING WELL AND GROUND WATER ELEVATIONS
FORMER BANKNOTE OF AMERICA FACILITY
SUFFERN, ROCKLAND COUNTY, NEW YORK

MONITORING WELL INDENTIFICATION	ELEVATION OF CASING (feet)	DEPTH TO GROUND WATER (feet)	ELEVATION OF GROUND WATER (feet)
MW-2	368.19	13.77	354.42
MW-3	369.64	17.08	352.56
MW-4	373.14	22.16	350.98
MW-5	366.91	20.55	346.36
MW-6	370.02	25.31	344.71
MW-7	371.30	25.87	345.43
MW-8	373.66	19.92	353.74
MW-10	368.97	22.91	346.06

NOTES:

Depth to ground water measured 30 November 2010

TABLE 2
SUMMARY OF ANALYTICAL RESULTS FOR TOTAL CHROMIUM IN GROUND WATER
FORMER BANKNOTE OF AMERICA FACILITY
SUFFERN, ROCKLAND COUNTY, NEW YORK

SAMPLE IDENTIFICATION	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-10	DW-1
SAMPLE DATES									
January-96	<0.010	**0.450**	---	---	---	---	---	---	---
May-96	<0.010	0.010	---	---	---	---	---	---	---
August-96	0.030	**0.070**	**0.290**	---	---	---	---	---	---
December-96	0.030	0.020	**1.300**	---	---	---	---	---	---
March-97	0.040	**0.080**	**0.470**	---	---	---	---	---	---
June-97	**0.080**	**0.350**	**2.400**	---	---	---	---	---	---
September-97	<0.010	**0.230**	**0.180**	0.020	**0.210**	0.030	---	---	---
December-97	<0.010	**0.150**	**0.210**	<0.010	**0.210**	<0.010	---	---	---
July-99	<0.010	0.040	**0.830**	<0.010	**0.080**	<0.010	---	---	---
July-02	0.006	0.031	**0.550**	**0.056**	0.044	<0.050	**0.180**	0.037	<.010
December-04	BRL J	BRL J	**0.814 J**	BRL J	0.047 J	BRL J	**0.274 J**	0.0092 J	BRL J
March-05	BRL J	BRL J	**1.23 J**	BRL J	0.0324 J	BRL J	**0.274 J**	BRL J	BRL J
June-05	BRL J	BRL J	**1.44 J**	0.0064 J	0.0132 J	BRL J	NS*	BRL J	BRL J
September-05	NS	NS	**0.0861 J**	0.0216 J	0.0357 J	NS	**0.0823 J**	NS	NS
December-05	NS	NS	**0.885**	0.0016 J	0.0184	NS	**0.237**	NS	NS
March-07	NS	NS	**0.716**	BRL J	0.0346	NS	**0.133**	NS	NS
May-08	NS	NS	**1.410**	BRL J	0.0347	NS	**0.119**	NS	NS
September-09	NS	NS	**1.580**	BRL J	0.0125	NS	**0.073**	NS	NS
November-10	NS	NS	**1.5000**	BRL	0.0181 J	NS	0.0410	NS	NS

Notes:

Concentrations reported in mg/l.

BRL= Below Reporting Limit.

NS = Not Sampled; the wells were removed from the sampling schedule after review of analytical data by Daniel Eaton of the NYSDEC.

NS* = Not Sampled; the wells was not sampled due to access issues.

Bold white text with black background indicates exceedance of the NYSDEC action level in ground water of 0.05 mg/l.

J indicates an estimated value as per the DUSR or the laboratory analytical data.

APPENDIX C
GROUND WATER SAMPLING RECORDS

Low-Flow Groundwater Sampling Form

Site Name

Site Address:

ERM

Well ID: MW-6
Date: 11/30/10
Sampling Personnel: R. Santos
Weather Conditions: ±40°F, overcast, breezy
Time: 10:20 → 10:45
File Name: Former Berkeley Facility

Total Depth (T.D.): —
Depth to Water (D.T.W.): [1] 25.31 ft
Total Volume Purged: 10.0 L
Purge Rate: ~0.5 gal/min
Tubing Type: Poly
Pump Intake (ft below M.P.): —
Screen Length: —
Well Diameter: 2"
Casing Type: PVC
Sampling Device: Geopump
Measuring Point: T.O.C.
color: clear odor: none

Time: (min)	DTW: (feet)	Comments:	Temp (°C)	SpC (uS/cm)	Cond (uS/cm)	DO (mg/L)	pH (std units	Turb NTU	ORP mV	Flow (ml/min)
Stabalization Criteria[2]	(see note below)[3]		+/- 3%	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 unit	+/- 10%[4]	+/- 10 mV	100-400
10:23	25.48		12.68	884	674	3.93	7.15	9.45	110.5	100
10:28	25.50		12.69	837	640	4.00	7.14	7.01	119.5	100
10:33	25.52		12.71	821	628	3.86	7.13	6.76	125.2	100
10:38	25.53		12.71	810	620	3.70	7.15	2.60	129.4	100
10:43	25.54		12.72	804	616	3.65	7.17	2.58	131.1	100

ampling Time: 10:45

amples Collected: MW-6 (12/10)

Analysis Requested: Total Cr

Preservative: HNO_3

ites:

- Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
- Stabilization criteria based on three most recent consecutive measurements.
- Total drawdown in well to be less than 0.1 m (0.32 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
- +/- 10% when turbidity is over 10 NTUs.

w-Flow Groundwater Sampling Form

ite Name

Site Address:

ERM

Well ID: MW-5
Date: 11/30/10
Sampling Personnel: R. Sands
Weather Conditions: ~40°f, overcast, light rain
Time: 10:50 → 11:45
File Name: Former Banknotes facility

Total Depth (T.D.): —
Depth to Water (D.T.W.): [1] 20.55
Total Volume Purged: ~ 3/4 gal
Purge Rate: 100
Tubing Type: Poly
Pump Intake (ft below M.P.): —

Screen Length: —
Well Diameter: 2"
Casing Type: PVC
Sampling Device: Geopump
Measuring Point: T.O.C.
color: clear odor: none

Time: (min) Stabalization Criteria[4]	DTW: (feet) (see note below)[3]	Comments:	Temp (°C) +/- 3%	SpC (uS/cm) +/- 3%	Cond (uS/cm) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[4]	ORP mV +/- 10 mV	Flow (ml/min) 100-400
10:52	20.67		12.65	909	718	8.03	6.98	6.76	158.2	100
10:57	20.81		13.44	896	698	5.09	6.65	6.55	161.6	100
11:02	20.83		13.25	981	761	4.91	6.49	6.31	166.6	100
11:07	20.83		13.08	1076	834	4.76	6.38	6.18	170.2	100
11:12	20.84		13.01	1191	970	4.64	6.30	6.11	173.8	100
11:17	20.84		13.00	1243	958	4.67	6.27	6.08	175.3	100
11:22	20.85		13.05	1261	974	4.65	6.26	6.01	175.1	100
11:27	20.86		13.16	1265	974	4.64	6.26	6.06	176.1	100
11:32	20.87		13.14	1272	984	4.64	6.24	6.04	176.7	100

Sampling Time: 11:35

Samples Collected: MW-5(12/10)

Analysis Requested: Total Cr

Preservative: HNO_3

Notes:

Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
Stabilization criteria based on three most recent consecutive measurements.
Total drawdown in well to be less than 0.1 m (0.32 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
+/- 10% when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

Site Name

Site Address:

ERM

Well ID: MW-4

Date: 11/30/10

Sampling Personnel: R. Santos

Weather Conditions: ± 40°F, overcast, light rain

Time: 11:56 → 12:50

File Name: former Banknotes facility

Total Depth (T.D.): —

Depth to Water (D.T.W): [1] 22.16

Total Volume Purged: ~3/4 gal.

Purge Rate: 100

Tubing Type: Poly

Pump Intake (ft below M.P.): —

Screen Length: —

Well Diameter: 2"

Casing Type: PVC

Sampling Device: Geopump

Measuring Point: T.O.C.

color: clear odor: none

Time: (min) Stabalization Criteria[4]	DTW: (feet) (see note below)[3]	Comments:	Temp (°C) +/- 3%	SpC (uS/cm) +/- 3%	Cond (uS/cm) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[4]	ORP mV +/- 10 mV	Flow (ml/min) 100-400
11:58	22.83		13.70	799	672	2.03	6.52	5.30	163.1	100
12:03	22.77		13.76	796	648	1.99	6.74	3.21	159.7	100
12:08	22.63		13.83	794	624	1.58	6.81	2.27	153.5	100
12:13	22.91		13.91	741	584	2.17	6.83	0.00	156.6	100
12:28	23.05		13.69	777	570	2.24	6.84	0.00	155.4	100
12:33	23.19		13.49	718	559	2.21	6.84	0.00	159.0	100
12.38	23.29		13.41	714	556	2.22	6.84	0.00	155.1	100
12:42	23.37		13.36	718	552	2.22	6.85	0.00	155.7	100

Sampling Time: 12:45

Samples Collected:

MW-4 (12/10)

Dup (12/10)

Analysis Requested:

Total Cr

Preservative:

HNO_3

Notes:

Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.

Stabilization criteria based on three most recent consecutive measurements.

Total drawdown in well to be less than 0.1 m (0.32 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).

+/- 10% when turbidity is over 10 NTUs.

Low-Flow Groundwater Sampling Form

Site Name

Site Address:

ERM

Well ID: MW-8
Date: 11/30/10
Sampling Personnel: R. Santy
Weather Conditions: ±40°, rain
Time: 13:05 → 14:00
File Name: former Benkoates facility

Total Depth (T.D.): –
Depth to Water (D.T.W): [1] 19.92
Total Volume Purged: 100
Purge Rate: ~0.5gal
Tubing Type: Poly
Pump Intake (ft below M.P.): –

Screen Length: –
Well Diameter: 2"
Casing Type: PVC
Sampling Device: T.O.C.S
Measuring Point: Grapump
color: clear odor: none

Time: (min) Stabalization Criteria[4]	DTW: (feet) (see note below)[3]	Comments:	Temp (°C) +/- 3%	SpC (uS/cm) +/- 3%	Cond (uS/cm) +/- 3%	DO (mg/L) +/- 10%	pH (std units) +/- 0.1 unit	Turb NTU +/- 10%[4]	ORP mV +/- 10 mV	Flow (ml/min) 100-400
13:06	20.05		14.76	698	685	5.88	7.03	0.78	167.3	150
13:11	20.08		15.72	1294	1065	3.52	7.14	0.00	160.3	100
13:16	20.15		15.87	1321	1091	3.36	7.17	0.00	158.9	100
13:21	20.16		15.89	1327	1096	3.35	7.16	0.00	159.3	100
13:26	20.17		15.97	1334	1104	3.37	7.16	0.00	159.7	100
13:31	20.18		16.01	1343	1112	3.31	7.16	0.00	160.2	100
13:36	20.19		16.05	1350	1119	3.35	7.16	0.00	160.7	100
13:41	20.20		16.00	1353	1120	3.28	7.16	0.00	161.1	100

Sampling Time: 13:45

Samples Collected: MW-8 (12/10)

Analysis Requested: Total Cr

Preservative: HNO_3

Notes:
1. Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
2. Stabilization criteria based on three most recent consecutive measurements.
3. Total drawdown in well to be less than 0.1 m (0.32 ft). Purging rate to be lowered as necessary to keep drawdown below 0.1 m (0.32 ft).
4. +/- 10% when turbidity is over 10 NTUs.

APPENDIX D
LABORATORY ANALYTICAL REPORT

Report Date:
15-Dec-10 16:42

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Environmental Resources Management
5788 Widewaters Pkwy
Dewitt, NY 13214
Attn: David W. Myers

Project: Former Banknote Facility-Suffern, NY
Project #: [none]

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SB21844-01	Dup (12/10)	Ground Water	30-Nov-10 10:00	01-Dec-10 10:30
SB21844-02	MW-6 (12/10)	Ground Water	30-Nov-10 10:45	01-Dec-10 10:30
SB21844-03	MW-8 (12/10)	Ground Water	30-Nov-10 13:45	01-Dec-10 10:30
SB21844-04	MW-5 (12/10)	Ground Water	30-Nov-10 11:35	01-Dec-10 10:30
SB21844-05	MW-4 (12/10)	Ground Water	30-Nov-10 12:45	01-Dec-10 10:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Hanibal C. Tayeh, Ph.D.
President/Laboratory Director

Technical Reviewer's Initial:

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes.
Please note that this report contains 5 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, FL-E87936 and NJ-MA012).

CASE NARRATIVE:

The samples were received 1.6 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 2.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

There is no relevant protocol-specific QC and/or performance standards non-conformances to report.

Sample Identification
Dup (12/10)
SB21844-01

Client Project #	Matrix	Collection Date/Time	Received
[none]	Ground Water	30-Nov-10 10:00	01-Dec-10

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation	Field Preservec		N/A			1	EPA 200/6000 methods	05-Dec-10	05-Dec-10	HB	1025079	
Total Metals by EPA 6000/7000 Series Methods													
7440-47-3	Chromium	1.49		mg/l	0.0050	0.0034	1	SW846 6010C	11-Dec-10	15-Dec-10	HB	1025694	X

Sample Identification
MW-6 (12/10)
SB21844-02

Client Project #	Matrix	Collection Date/Time	Received
[none]	Ground Water	30-Nov-10 10:45	01-Dec-10

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation	Field Preservec		N/A			1	EPA 200/6000 methods	05-Dec-10	05-Dec-10	HB	1025079	
Total Metals by EPA 6000/7000 Series Methods													
7440-47-3	Chromium	0.0181		mg/l	0.0050	0.0034	1	SW846 6010C	11-Dec-10	15-Dec-10	HB	1025694	X

Sample Identification
MW-8 (12/10)
SB21844-03

Client Project #	Matrix	Collection Date/Time	Received
[none]	Ground Water	30-Nov-10 13:45	01-Dec-10

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation	Field Preservec		N/A			1	EPA 200/6000 methods	05-Dec-10	05-Dec-10	HB	1025079	
Total Metals by EPA 6000/7000 Series Methods													
7440-47-3	Chromium	0.0410		mg/l	0.0050	0.0034	1	SW846 6010C	11-Dec-10	15-Dec-10	HB	1025694	X

Sample Identification
MW-5 (12/10)
SB21844-04

Client Project #	Matrix	Collection Date/Time	Received
[none]	Ground Water	30-Nov-10 11:35	01-Dec-10

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation	Field Preservec		N/A			1	EPA 200/6000 methods	05-Dec-10	05-Dec-10	HB	1025079	
Total Metals by EPA 6000/7000 Series Methods													
7440-47-3	Chromium	BDL	U	mg/l	0.0050	0.0034	1	SW846 6010C	11-Dec-10	15-Dec-10	HB	1025694	X

Sample Identification
MW-4 (12/10)
SB21844-05

Client Project #	Matrix	Collection Date/Time	Received
[none]	Ground Water	30-Nov-10 12:45	01-Dec-10

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 200/6000 Series Methods													
	Preservation	Field Preservec		N/A			1	EPA 200/6000 methods	05-Dec-10	05-Dec-10	HB	1025079	
Total Metals by EPA 6000/7000 Series Methods													
7440-47-3	Chromium	1.50		mg/l	0.0050	0.0034	1	SW846 6010C	11-Dec-10	15-Dec-10	HB	1025694	X

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch 1025694 - SW846 3005A										
Blank (1025694-BLK1)					Prepared: 11-Dec-10 Analyzed: 15-Dec-10					
Chromium	BRL	U	mg/l	0.0034						
LCS (1025694-BS1)					Prepared: 11-Dec-10 Analyzed: 15-Dec-10					
Chromium	1.33		mg/l	0.0034	1.25		107	85-115		
LCS Dup (1025694-BSD1)					Prepared: 11-Dec-10 Analyzed: 15-Dec-10					
Chromium	1.32		mg/l	0.0034	1.25		106	85-115	0.8	20

Notes and Definitions

U	Analyte included in the analysis, but not detected
BDL	Below Detection Limit - Analyte NOT DETECTED at or above the minimum detection limit
BRL	Below Reporting Limit - Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

A plus sign (+) in the Method Reference column indicates the method is not accredited by NELAC.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic

Validated by:
Hanibal C. Tayeh, Ph.D.
Kimberly Wisk
Rebecca Merz

OB 21844

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☑ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ERM
5788 Widewaters Parkway
Dewitt, NY 13214

Telephone #: 315-233-3038
Project Mgr. Dave Myers

Invoice To: Sam C

P.O. No.: _____ RQN: _____

Project No.: _____
Site Name: former Bankrates facility
Location: Saffern State: NY
Sampler(s): R. Sants

1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 (4=HNO_3) 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8=$NaHSO_4$ 9=_____ 10=_____ 11=_____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW=Surface Water SO=Soil SL=Sludge A=Air
X1=_____ X2=_____ X3=_____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Total Cr
21844-01	Dup (12/10)	11/30/10	10:00	G	GW				1	X
-02	MW-6 (12/10)		10:45							
-03	MW-8 (12/10)		13:45							
-04	MW-5 (12/10)		11:35							
-05	MW-4 (12/10		12:45							

List preservative code below:

Analyses:

QA/QC Reporting Notes:
(check as needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☑ Other ASP B

State specific reporting standards: New York

Relinquished by:	Received by:	Date:	Time:	Temp°C
Fed Ex	Via FedEx	11/30/10	14:30	
		12/1/10	1030	1.6

☐ EDD Format _____
☑ E-mail to Dave.Myers@ERM.com
Robert.Sants@ERM.com

☐ Ambient ☑ Iced ☐ Refrigerated ☐ Fridge temp ____ °C ☐ Freezer temp ____ °C

75

100

FedEx Express US Airbill

FedEx Tracking Number 8744 6939 2739

Form ID No. 0215

Recipient's Copy

RECIPIENT: PEEL HERE

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From This portion can be removed for Recipient's records.

Date 11/30/10

FedEx Tracking Number 874469392739

Sender's Name R. Scotts

Phone 315 445-2554

Company ERM NORTHEAST INC

Address 5788 WIDEWATERS PKWY STE 12

Dept./Floor/Suite/Room

City DE WITT State NY ZIP 13214

2 Your Internal Billing Reference Banknotes

3 To

Recipient's Name

Phone 413 789-9018

Company Spectrum Analytical

Address 11 Almgren Dr

We cannot deliver to P.O. boxes or P.O. ZIP codes.

HOLD Weekday
FedEx location address REQUIRED. **NOT available for** FedEx First Overnight.

HOLD Saturday
FedEx location address **REQUIRED. Available ONLY for** FedEx Priority Overnight and FedEx 2Day to select locations.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Agawam State MA ZIP 01001

0429599413

8744 6939 2739

4a Express Package Service

* To most locations.

Packages up to 150 lbs.

- [x] **FedEx Priority Overnight** Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] **FedEx Standard Overnight** Next business afternoon.* Saturday Delivery NOT available.
- [ ] **FedEx First Overnight** Earliest next business morning delivery to select locations.*
- [ ] **FedEx 2Day** Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] **FedEx Express Saver** Third business day.* Saturday Delivery NOT available.

4b Express Freight Service

** To most locations.

Packages over 150 lbs.

- [ ] **FedEx 1Day Freight** Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected. FedEx 1Day Freight Booking No.
- [ ] **FedEx 2Day Freight** Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] **FedEx 3Day Freight** Third business day.** Saturday Delivery NOT available.

5 Packaging

* Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak* Includes FedEx Small Pak and FedEx Large Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] **SATURDAY Delivery** **NOT available for** FedEx Standard Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] **No Signature Required** Package may be left without obtaining a signature for delivery.
- [ ] **Direct Signature** Someone at recipient's address may sign for delivery. ***Fee applies.***
- [ ] **Indirect Signature** If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. ***Fee applies.***

Does this shipment contain dangerous goods?

One box must be checked.

- [x] No
- [ ] Yes As per attached Shipper's Declaration.
- [ ] Yes Shipper's Declaration not required.
- [ ] Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

Obtain recip. Acct. No. [ ]

- [x] Sender Acct. No. in Section 1 will be billed
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages 1

Total Weight 18.0 lbs.

Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

605

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NY Lab #11393/11840
FL Lab #E87600/E87936

SPECTRUM ANALYTICAL, INC.

Featuring

Hanibal Technology

Quality Assurance/Quality Control Data Deliverable
ASP B

Prepared for

Environmental Resources Management

Project Name: Former Banknote Facility – Suffern, NY

Work Order SB21844
SDG#21844
Submitted December 1st, 2010

Table of Contents

Laboratory Name: Spectrum Analytical, Inc. featuring Hanibal Technology
City/State: Agawam, MA
Client Name: Environmental Resources Management
Project Name/Number: Former Banknote Facility, Suffern, NY
SDG#: 21844
Associated Work Orders: SB21844

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SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Report of Laboratory Analyses for Environmental Resources Management

Client Project: Former Banknote Facility – Suffern, NY
Groundwater samples collected on 11/30/10

Project Number: NA

Spectrum Analytical, Inc. Project ID: SB21844

December 30th, 2010

Prepared For:

Environmental Resources Management
5788 Widewaters Pkwy
Dewitt, NY 13214
Attn: David Myers

Prepared By:

Spectrum Analytical, Inc.
11 Almgren Drive
Agawam, MA 01001
(800) 789-9115

SDG21844
SB21844 General Narrative

Spectrum Analytical, Inc. submits the enclosed data for the site characterization of Former Banknote Facility located in Suffern, NY. Samples submitted for analysis Environmental Resources Management. This deliverable contains data for five groundwater samples submitted on December 1st, 2010.

In addition to USEPA SW846 method analytical guidelines, the analysis was performed according to criteria dictated by National Environmental Laboratory Accreditation Conference (NELAC) and within the guidelines established by the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) requirements.

The following observations and/or deviations are observed for the following analyses:

1. **Overall Observations:**

   All of the attached submittals are original other than logbook pages and copies of quality assurance data, which may be shared by other cases. For these, the originals are archived within the laboratory. Standard Operating Procedures follow the corresponding methods without modification.

The pages in this report have been numbered consecutively, starting with the general narrative and ending with the page labeled as "Last Page of data Report".

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 electronic data package, has been authorized by the laboratory director as verified by the following signature.

Date: 12/30/10

Nicole Leja
Laboratory Director

SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Sample Transmittal Documentation

OB 21844

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:
- ☑ Standard TAT - 7 to 10 business days
- ☐ Rush TAT - Date Needed: _____
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.
- Samples disposed of after 60 days unless otherwise instructed.

Report To: ERM
5788 Widewaters Parkway
Dewitt, NY 13214

Telephone #: 315-233-3038
Project Mgr. Dave Myers

Invoice To: Same

P.O. No.: _____ RQN: _____

Project No.: _____
Site Name: former Bentrates facility
Location: Sutton State: NY
Sampler(s): R. Sentz

1=Na_2S2O_3 2=HCl 3=H_2SO_4 (4=HNO_3) 5=NaOH 6=Ascorbic Acid 7=CH_3OH
8= $NaHSO_4$ 9= _____ 10= _____ 11= _____

DW=Drinking Water GW=Groundwater WW=Wastewater
O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
X1= _____ X2= _____ X3= _____

G=Grab C=Composite

Lab Id:	Sample Id:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Total Cr	Analyses:	List preservative code below:
21844-01	Dup (12/10)	11/30/10	10:00	G	GW				1	X		
-02	MW-6 (12/10)		10:45									
-03	MW-8 (12/10)		13:45									
-04	MW-5 (12/10)		11:35									
-05	MW-4 (12/10)		12:45									

QA/QC Reporting Notes: (check as needed)
- ☐ Provide MA DEP MCP CAM Report
- ☐ Provide CT DPH RCP Report

QA/QC Reporting Level
☐ Standard ☐ No QC
☑ Other ASP B

State specific reporting standards: New York

Relinquished by:	Received by:	Date:	Time:	Temp°C
Fed Ex	Via FedEx	11/30/10	14:30	
		12/1/10	1030	1.6

☐ EDD Format _____
☑ E-mail to Dave.Myers@ERM.com
Robert.Sentz@ERM.com

☐ Ambient ☑ Iced ☐ Refrigerated ☐ Fridge temp ___ °C ☐ Freezer temp ___ °C

WORK ORDER

Printed: 12/3/2010 2:42:31PM

SB21844

Spectrum Analytical, Inc. - Agawam, MA

Report To:
Environmental Resources Management - De
David W. Myers
5788 Widewaters Pkwy
Dewitt, NY 13214
Phone: (315) 445-2554
Fax: (315) 445-2543

Invoice To:
Environmental Resources Management - De
Accounts Payable
5788 Widewaters Pkwy
Dewitt, NY 13214
Phone: (315) 445-2554
Fax: (315) 445-2543

Project #:	[none]
Project:	Former Banknote Facility-Suffern, NY
Date Due:	10-Dec-10 17:00
Received By:	Katy Wilkinson
Date Received:	01-Dec-10 10:30
Temperature:	1.6°C
PO #:	

Lab ID	Client ID	Sampled	Lab Matrix / Report Matrix	Containers
SB21844-01	Dup (12/10)	30-Nov-10 10:00	Aqueous / Ground Water	A - 500 mL Poly HNO3
SB21844-02	MW-6 (12/10)	30-Nov-10 10:45	Aqueous / Ground Water	A - 500 mL Poly HNO3
SB21844-03	MW-8 (12/10)	30-Nov-10 13:45	Aqueous / Ground Water	A - 500 mL Poly HNO3
SB21844-04	MW-5 (12/10)	30-Nov-10 11:35	Aqueous / Ground Water	A - 500 mL Poly HNO3
SB21844-05	MW-4 (12/10)	30-Nov-10 12:45	Aqueous / Ground Water	A - 500 mL Poly HNO3

SB21844

Spectrum Analytical, Inc. - Agawam, MA

Analysis	Due	TAT	Comments
SB21844-01 Dup (12/10)			
@Metals Preservation	10-Dec-10 16:00	7	ASP B/NY stnds/report J&U flags
Cr Total ICP 6010B	"	"	"
SB21844-02 MW-6 (12/10)			
@Metals Preservation	"	"	"
Cr Total ICP 6010B	"	"	"
SB21844-03 MW-8 (12/10)			
@Metals Preservation	"	"	"
Cr Total ICP 6010B	"	"	"
SB21844-04 MW-5 (12/10)			
@Metals Preservation	"	"	"
Cr Total ICP 6010B	"	"	"
SB21844-05 MW-4 (12/10)			
@Metals Preservation	"	"	"
Cr Total ICP 6010B	"	"	"

SPECTRUM ANALYTICAL, INC.
FEATURING
HANDBAL TECHNOLOGY

SAMPLE RECEIPT CONFIRMATION SHEET

Date: 12/1/10 Pages: 2

To: Dave Myers Fax #: 315 445-2543

From: Spectrum Analytical Sample Department

☐ Colleen Kroczewski

☐ Elie Makhoul

☐ Katy Wilkinson

The following outlines the condition of samples for the attached Chain of Custody as received through shipment.

Custody seals present? Yes / No

Seals intact? Yes / No / n/a

Samples temperature upon receipt 1.6 °C

Cooled with ice? Yes / No

Chain of Custody (COC) present? Yes / No

Samples labeled? Yes / No

All samples on COC accounted for? Yes / No

Samples received intact? Yes / No

Samples received within holding time? Yes / No

Any discrepancies noted between COC and samples? Yes / No

NOTES: _____

CONFIDENTIALITY STATEMENT
The information contained in this transmission is intended for the exclusive use of the [illegible] above and is privileged and [illegible]. If you are not the intended recipient [illegible] that any form of dissemination [illegible] communication is strictly prohibited [illegible] communication in error, please immediately notify Spectrum Analytical at the [illegible]

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

SAMPLE INTEGRITY FORM

Sample ID			Preservative Added					Notes:
	Initial pH	Sample split	50% HCl	50% H_2SO_4	50% NaOH	50% HNO_3	Final pH	Work Order No. SB21844
01-05A	2							

Solid samples for VOC analyses: Submitted in SA provided $CH_3OH/NaHSO_4$ vials _____
Submitted in $CH_3OH/NaHSO_4$, not SA vials _____
Not submitted in $CH_3OH/NaHSO_4$ _____

Notes: _____

Login Analyst Initials: [signature] Date: 12/3/10

ENVIRONMENTAL ANALYSES

 11 Almgren Drive • Agawam, Massachusetts 01001 • Operational Building & Sample Receiving

100

FedEx Express US Airbill

FedEx Tracking Number 8744 6939 2739

Form ID No. 0215

Recipient's Copy

RECIPIENT: PEEL HERE

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From This portion can be removed for Recipient's records.

Date 11/30/10

FedEx Tracking Number 874469392739

Sender's Name R. Sentz

Phone 315 445-2554

Company ERM NORTHEAST INC

Address 5788 WIDEWATERS PKWY STE 12

City DE WITT

State NY ZIP 13214

Dept./Floor/Suite/Room

2 Your Internal Billing Reference Banknotes

3 To

Recipient's Name

Phone 413 784-9018

Company Spectrum Analytical

Address 11 Almgren Dr

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Agawam

State MA ZIP 01001

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0429594413

4a Express Package Service * To most locations. Packages up to 150 lbs.

- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.*
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

4b Express Freight Service ** To most locations. Packages over 150 lbs.

- [ ] FedEx 1Day Freight — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

FedEx 1Day Freight Booking No.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak and FedEx Large Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment *Bill to:*

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

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SPECTRUM ANALYTICAL, INC.

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HANIBAL TECHNOLOGY

Form 1 Summary Pack

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

Dup (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-01	File ID:	20101215-035
Sampled:	11/30/10 10:00	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 13:43
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	1.49	1		SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

MW-6 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-02	File ID:	20101215-036
Sampled:	11/30/10 10:45	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 13:50
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	0.0181	1		SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

MW-8 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-03	File ID:	20101215-037
Sampled:	11/30/10 13:45	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 13:58
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	0.0410	1		SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

MW-5 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-04	File ID:	20101215-038
Sampled:	11/30/10 11:35	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 14:06
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	0.0034	1	U	SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

MW-4 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-05	File ID:	20101215-039
Sampled:	11/30/10 12:45	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 14:13
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	1.50	1		SW846 6010C

SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

Inorganics
Method 6010B

CROSS REFERENCE TABLE

SW846 6010C

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA	SDG:	21844
Client:	Environmental Resources Management - Dewitt, N	Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]		

Client Sample ID:	Lab Sample ID:
Dup (12/10)	SB21844-01
MW-6 (12/10)	SB21844-02
MW-8 (12/10)	SB21844-03
MW-5 (12/10)	SB21844-04
MW-4 (12/10)	SB21844-05

CASE NARRATIVE

Spectrum Analytical, Inc. Lab Reference No.: (SB21844)

Client : Environmental Resources Management - Dewitt, NY

Project: Former Banknote Facility-Suffern, NY / [none]

SDG #: 21844

I. RECEIPT

No exceptions were encountered unless a Sample Receipt Exception
or a communication form is included in the addendum with this package.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding time.

B. Sample Analysis:

All samples were analyzed within the method-specified holding time.

III. METHODS

Analyses were performed according to: SW846 6010C

IV. PREPARATION

Aqueous Samples were prepared according to: SW846 3005A

V. INSTRUMENTATION

The following equipment was used to analyze SW846 6010C

Iris 3 Details : Thermo IRIS intrepid II XDL CETAC Autosampler

All sample data within this SDG was generated after ICP-AES interelement corrections and background corrections were applied.

VI. ANALYSIS

A. Calibration:

All method criteria were met with the following exceptions:

Chromium In sequence S011625, sample S011625-CRL2 : The low level check standard, CRL2 failed and was rerun as CRL3.

B. Blanks:

All initial and continuing blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

In Batch: 1025694 All LCS were within the acceptance criteria.

2. Matrix Spike / Matrix Spike Duplicate Samples (MS/MSD):

No client requested MS/MSD, however the method criteria may have been fulfilled with non-SDG source samples.

3. Post Spike Samples (PS):

N/A

4. Reference:

N/A

D. Duplicate sample:

No client requested Duplicate, however the method criteria may have been fulfilled with non-SDG source samples.

E. Samples:

All results were within the method criteria.

In batch S011625, sample S011625-SRD1 from source sample SB21844-01 client ID Dup (12/10) : The sample concentrations for chromium were sufficiently high (minimally a factor of 50xMDL) therefore a serial dilution is applicable for these analytes.

Inorganics
Method 6010B

QC Summary

FORM IIa - INITIAL AND CONTINUING CALIBRATION CHECK

SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - Dewitt, NY
Project: Former Banknote Facility-Suffern, NY
Instrument ID: Iris 3
Calibration: UNASSIGNED
Sequence: S011625

Lab Sample ID	Analyte	True	Found	%R	QC Limits	Units	Method
S011625-ICV1	Chromium	2.00	2.16	108	90 - 110	mg/l	IR
S011625-CCV1	Chromium	5.00	5.25	105	90 - 110	mg/l	IR
S011625-CCV2	Chromium	5.00	5.18	104	90 - 110	mg/l	IR
S011625-CCV3	Chromium	5.00	5.26	105	90 - 110	mg/l	IR

* Values outside of QC limits

FORM II b - CRDL STANDARD

SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - Dewitt, NY
Project: Former Banknote Facility-Suffern, NY
Instrument ID: Iris 3
Calibration: UNASSIGNED
Sequence: S011625

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S011625-CRL1	Chromium	0.0100	0.0119	119	mg/l	70 - 130
S011625-CRL2	Chromium	0.0100	0.0139	139 *	mg/l	70 - 130
S011625-CRL3	Chromium	0.0100	0.0122	122	mg/l	70 - 130

* Values outside of QC limits

FORM III - BLANKS
SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - Dewitt
Project: Former Banknote Facility-Suffern, NY
Instrument ID: Iris 3
Calibration: UNASSIGNED
Sequence: S011625

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
S011625-ICB1	Chromium	BRL	0.0100	mg/l	U	SW846 6010C
S011625-CCB1	Chromium	BRL	0.0100	mg/l	U	SW846 6010C
1025694-BLK1	Chromium	BRL	0.0050	mg/l	U	SW846 6010C
S011625-CCB2	Chromium	BRL	0.0100	mg/l	U	SW846 6010C
S011625-CCB3	Chromium	BRL	0.0100	mg/l	U	SW846 6010C

FORM IV - ICP INTERFERENCE CHECK SAMPLE

SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - D
Project: Former Banknote Facility-Suffern, NY
Instrument ID: Iris 3
Calibration: UNASSIGNED
Sequence: S011625

Lab Sample ID	Analyte	True	Found	%R
S011625-IFA1	Iron	50.0	50.41000	101
	Magnesium	125	123.40000	99
	Aluminum	125	124.90000	100
	Calcium	125	124.60000	100
	Chromium		-0.00210	
S011625-IFB1	Iron	25.0	24.56000	98
	Magnesium	62.5	60.58000	97
	Aluminum	62.5	60.02000	96
	Calcium	62.5	60.73000	97
	Chromium	0.250	0.25390	102
S011625-IFA2	Iron	50.0	50.82000	102
	Magnesium	125	123.30000	99
	Aluminum	125	123.40000	99
	Calcium	125	123.20000	99
	Chromium		-0.00100	
S011625-IFB2	Iron	25.0	24.80000	99
	Magnesium	62.5	60.75000	97
	Aluminum	62.5	59.39000	95
	Calcium	62.5	60.34000	97
	Chromium	0.250	0.25630	103

* Values outside of QC limits (Acceptance Limits: +/- 20%)

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

SW846 6010C

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA	SDG:	21844
Client:	Environmental Resources Management - Dewitt, N	Project:	Former Banknote Facility-Suffern, NY
Matrix:	Aqueous	Instrument:	Iris 3
Batch:	1025694	Laboratory ID:	1025694-BS1
Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Analyzed:	12/15/10 12:06		
		Spike ID:	10K0900

COMPOUND	SPIKE ADDED (mg/l)	LCS CONCENTRATION (mg/l)	LCS % REC. #	QC LIMITS REC.
Chromium	1.25	1.33	107	85 - 115

COMPOUND	SPIKE ADDED (mg/l)	LCSD CONCENTRATION (mg/l)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Chromium	1.25	1.32	106	0.8	20	85 - 115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Individual peaks for multi-component analytes are indicated by a number in parentheses

FORM VIII - SERIAL DILUTION

SW846 6010C

Dup (12/10)

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - Dewitt, NY
Project: Former Banknote Facility-Suffern, NY
Laboratory ID: S011625-SRD1
Sequence: S011625
Lab Source ID: SB21844-01
Preparation: 1025694
Initial/Final: 50 / 25
Source Sample Name: Dup (12/10)
% Solids:

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method	QC Limits % Difference
Chromium	1.49		1.57		5		SW846 6010C	10

* Values outside of QC limits

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS

SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA **SDG:** 21844

Client: Environmental Resources Management - Dewitt, NY **Project:** Former Banknote Facility-Suffern, NY

Analyte	MDL	MRL	Units
Iron	0.0047	0.0100	mg/l
Magnesium	0.0049	0.0250	mg/l
Aluminum	0.0056	0.0075	mg/l
Calcium	0.0435	0.100	mg/l
Chromium	0.0067	0.0100	mg/l

Inorganics
Method 6010B

Sample Data

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

Dup (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-01	File ID:	20101215-035
Sampled:	11/30/10 10:00	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 13:43
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	1.49	1		SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

MW-6 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-02	File ID:	20101215-036
Sampled:	11/30/10 10:45	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 13:50
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	0.0181	1		SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

MW-8 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-03	File ID:	20101215-037
Sampled:	11/30/10 13:45	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 13:58
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	0.0410	1		SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

MW-5 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-04	File ID:	20101215-038
Sampled:	11/30/10 11:35	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 14:06
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	0.0034	1	U	SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

MW-4 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-05	File ID:	20101215-039
Sampled:	11/30/10 12:45	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 14:13
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	1.50	1		SW846 6010C

Sample Name: SB21844-01 Acquired: 12/15/2010 13:43:15 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Dup (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0036**	**.9085**	**.0469**	**-.0052**	**.7820**	**.0880**	**.0000**	**239.1**
Stddev	.0011	.0260	.0232	.0009	.0058	.0003	.000	1.5
%RSD	29.78	2.864	49.57	16.74	.7379	.3526	820.8	.6243
#1	.0029	.8850	.0472	-.0062	.7758	.0878	.0000	237.5
#2	.0031	.9365	.0699	-.0045	.7829	.0884	-.0002	239.5
#3	.0049	.9041	.0235	-.0051	.7872	.0879	.0002	240.4

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0005**	**2.971**	**.0045**	**.6416**	**.6602**	**5.548**	**.0912**
Stddev	.0001	.0001	.009	.0010	.0034	.0277	.132	.0045
%RSD	27.14	18.10	.3004	23.51	.5244	4.188	2.382	4.903
#1	-.0006	.0004	2.981	.0033	.6454	.6840	5.470	.0941
#2	-.0004	.0006	2.968	.0053	.6393	.6668	5.474	.0860
#3	-.0003	.0005	2.964	.0047	.6400	.6299	5.701	.0934

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**37.98**	**45.49**	**.4994**	**-.0002**	**203.9**	**.0054**	**.0606**	**.0048**
Stddev	.28	.09	.0024	.0002	.7	.0007	.0018	.0024
%RSD	.7447	.1888	.4765	104.9	.3413	12.17	2.952	50.85
#1	37.71	45.39	.5022	-.0002	203.5	.0048	.0627	.0056
#2	37.96	45.56	.4984	.0000	204.7	.0053	.0595	.0021
#3	38.28	45.50	.4977	-.0003	203.5	.0061	.0596	.0067

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**53.74**	**.0191**	**.0003**	**16.81**	**.0004**	**.2161**	**.0270**	**.0040**
Stddev	.37	.0027	.0008	.40	.0013	.0029	.0020	.0061
%RSD	.6808	14.35	300.7	2.372	336.2	1.337	7.251	150.3
#1	53.59	.0160	.0005	16.36	.0004	.2128	.0250	.0107
#2	53.48	.0200	.0010	16.92	-.0009	.2175	.0273	-.0013
#3	54.16	.0212	-.0006	17.14	.0017	.2180	.0288	.0027

Sample Name: SB21844-01 Acquired: 12/15/2010 13:43:15 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Dup (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0023**	**.0307**
Stddev	.0017	.0002
%RSD	72.15	.5887
#1	.0042	.0309
#2	.0014	.0308
#3	.0013	.0305

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**200.41**	**63.824**	**360.08**
Stddev	.69	.149	6.25
%RSD	.34435	.23389	1.7351
#1	201.06	63.656	367.03
#2	199.69	63.875	354.93
#3	200.49	63.941	358.28

Sample Name: SB21844-02 Acquired: 12/15/2010 13:50:55 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: MW-6 (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**.0609**	**-.6863**	**.0012**	**.2006**	**.1721**	**-.0002**	**204.3**
Stddev	.0018	.0084	.0642	.0022	.0037	.0018	.0002	1.2
%RSD	103.8	13.78	9.353	191.2	1.845	1.025	122.8	.5687
#1	.0037	.0641	-.6473	.0005	.1985	.1710	-.0004	204.7
#2	.0004	.0514	-.6511	.0036	.1984	.1712	.0001	203.0
#3	.0009	.0672	-.7604	-.0007	.2049	.1742	-.0002	205.3

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0009**	**.0362**	**.0009**	**.1411**	**.1778**	**3.571**	**.0939**
Stddev	.0002	.0002	.0002	.0004	.0020	.0238	.145	.0039
%RSD	102.0	19.11	.5021	42.21	1.451	13.40	4.051	4.175
#1	-.0004	.0008	.0364	.0008	.1435	.1807	3.647	.0981
#2	-.0001	.0012	.0360	.0006	.1399	.2000	3.661	.0932
#3	.0000	.0008	.0361	.0014	.1400	.1526	3.404	.0904

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**44.83**	**54.48**	**.1435**	**-.0018**	**191.9**	**.0064**	**.0310**	**.0045**
Stddev	.62	.17	.0018	.0001	.8	.0007	.0013	.0043
%RSD	1.382	.3084	1.228	7.075	.4107	11.40	4.233	95.45
#1	45.13	54.64	.1425	-.0019	192.6	.0070	.0304	.0060
#2	44.11	54.31	.1423	-.0019	191.0	.0067	.0300	.0080
#3	45.24	54.50	.1455	-.0017	192.1	.0056	.0325	-.0003

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.66**	**.0008**	**-.0041**	**15.71**	**-.0014**	**.1467**	**-.0011**	**.0069**
Stddev	.10	.0021	.0026	.07	.0014	.0031	.0005	.0037
%RSD	.9461	251.0	62.38	.4618	99.33	2.096	43.23	54.48
#1	10.57	-.0007	-.0063	15.72	-.0027	.1438	-.0008	.0094
#2	10.66	.0032	-.0047	15.63	.0000	.1464	-.0017	.0026
#3	10.77	.0000	-.0013	15.78	-.0015	.1499	-.0010	.0087

Sample Name: SB21844-02 Acquired: 12/15/2010 13:50:55 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: MW-6 (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0007**	**.0264**
Stddev	.0012	.0003
%RSD	165.9	.9822
#1	.0008	.0261
#2	-.0005	.0265
#3	.0019	.0266

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**201.62**	**62.666**	**356.39**
Stddev	2.34	1.187	9.54
%RSD	1.1595	1.8935	2.6768
#1	199.19	61.318	367.12
#2	201.80	63.550	353.21
#3	203.86	63.131	348.85

Sample Name: SB21844-03 Acquired: 12/15/2010 13:58:33 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: MW-8 (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023**	**.0149**	**-1.145**	**.0030**	**.2423**	**.3240**	**.0000**	**359.2**
Stddev	.0007	.0028	.079	.0016	.0026	.0026	.000	4.6
%RSD	29.87	18.75	6.908	52.34	1.082	.8054	567.0	1.286
#1	.0030	.0126	-1.081	.0030	.2404	.3240	-.0002	356.2
#2	.0016	.0180	-1.121	.0014	.2453	.3267	-.0001	356.9
#3	.0023	.0141	-1.233	.0045	.2412	.3215	.0002	364.5

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0002**	**.0819**	**.0043**	**.1496**	**.1343**	**6.806**	**.1610**
Stddev	.000	.0003	.0019	.0013	.0018	.0385	.114	.0029
%RSD	7769.	142.5	2.313	30.42	1.202	28.71	1.680	1.812
#1	.0000	.0004	.0838	.0052	.1510	.1090	6.760	.1601
#2	.0002	.0003	.0800	.0049	.1476	.1786	6.723	.1587
#3	-.0002	-.0001	.0818	.0028	.1503	.1152	6.937	.1643

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**71.50**	**95.31**	**.0041**	**-.0018**	**492.6**	**.0051**	**.0194**	**.0033**
Stddev	1.44	.20	.0001	.0001	2.3	.0006	.0016	.0011
%RSD	2.008	.2150	2.257	7.607	.4742	11.57	8.274	33.40
#1	70.23	95.26	.0041	-.0017	490.6	.0051	.0177	.0024
#2	71.20	95.14	.0040	-.0019	495.2	.0057	.0197	.0030
#3	73.06	95.54	.0042	-.0017	492.0	.0046	.0208	.0045

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**13.32**	**.0002**	**-.0043**	**17.28**	**-.0013**	**.3054**	**-.0032**	**.0088**
Stddev	.05	.0004	.0012	.12	.0023	.0025	.0003	.0037
%RSD	.3740	199.0	27.11	.7059	175.2	.8336	10.18	42.05
#1	13.27	.0005	-.0035	17.35	-.0034	.3026	-.0029	.0090
#2	13.32	.0003	-.0038	17.14	-.0016	.3075	-.0035	.0124
#3	13.37	-.0002	-.0057	17.35	.0011	.3063	-.0031	.0050

Sample Name: SB21844-03 Acquired: 12/15/2010 13:58:33 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: MW-8 (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**-.0002**	**.0357**
Stddev	.0019	.0001
%RSD	877.9	.2823
#1	-.0023	.0358
#2	.0002	.0356
#3	.0015	.0358

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**201.28**	**58.913**	**352.08**
Stddev	.58	2.174	10.88
%RSD	.28573	3.6906	3.0906
#1	201.52	59.899	362.36
#2	200.62	60.420	353.19
#3	201.69	56.421	340.68

Sample Name: SB21844-04 Acquired: 12/15/2010 14:06:12 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: MW-5 (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037**	**.3884**	**.1125**	**.0037**	**.1586**	**.0948**	**.0000**	**28.98**
Stddev	.0009	.0019	.0066	.0007	.0027	.0017	.000	.18
%RSD	24.57	.4980	5.880	20.17	1.680	1.760	91360.	.6382
#1	.0027	.3867	.1173	.0038	.1617	.0929	.0000	29.17
#2	.0038	.3905	.1153	.0029	.1568	.0956	-.0001	28.80
#3	.0045	.3881	.1050	.0044	.1574	.0959	.0001	28.96

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0004**	**.0024**	**.0044**	**.3316**	**.3337**	**6.447**	**.1908**
Stddev	.0001	.0002	.0004	.0011	.0026	.0171	.137	.0031
%RSD	94.78	44.95	17.08	24.76	.7946	5.132	2.123	1.629
#1	-.0002	.0007	.0029	.0039	.3346	.3331	6.604	.1873
#2	-.0003	.0003	.0022	.0036	.3299	.3169	6.353	.1923
#3	.0000	.0003	.0022	.0056	.3303	.3512	6.383	.1930

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.523**	**3.686**	**.0127**	**-.0017**	**759.4**	**.0048**	**.0866**	**.0036**
Stddev	.010	.025	.0001	.0002	7.0	.0004	.0007	.0004
%RSD	.2874	.6701	.7853	10.95	.9240	8.182	.8595	10.27
#1	3.528	3.709	.0127	-.0015	764.8	.0050	.0872	.0040
#2	3.512	3.687	.0126	-.0016	751.5	.0052	.0858	.0035
#3	3.530	3.660	.0128	-.0019	761.9	.0044	.0867	.0033

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.71**	**-.0016**	**-.0049**	**8.971**	**.0005**	**.0967**	**.0082**	**.0037**
Stddev	.26	.0009	.0020	.063	.0006	.0011	.0005	.0027
%RSD	1.049	57.33	41.25	.7034	110.4	1.129	6.452	73.10
#1	24.66	-.0023	-.0034	9.041	.0006	.0955	.0076	.0026
#2	24.47	-.0006	-.0040	8.920	.0011	.0971	.0085	.0069
#3	24.98	-.0018	-.0072	8.952	-.0001	.0976	.0085	.0018

Sample Name: SB21844-04 Acquired: 12/15/2010 14:06:12 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: MW-5 (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0011**	**.0236**
Stddev	.0013	.0000
%RSD	117.9	.1906
#1	.0020	.0236
#2	-.0004	.0236
#3	.0018	.0236

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**207.61**	**62.651**	**365.95**
Stddev	1.93	2.286	3.58
%RSD	.92942	3.6482	.97942
#1	208.86	60.021	369.68
#2	205.38	64.164	362.53
#3	208.57	63.766	365.64

Sample Name: SB21844-05 Acquired: 12/15/2010 14:13:52 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: MW-4 (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**.3263**	**-.5174**	**-.0064**	**.7454**	**.0837**	**-.0001**	**241.4**
Stddev	.0011	.0102	.0554	.0010	.0040	.0004	.0002	3.5
%RSD	39.41	3.132	10.70	15.14	.5320	.5082	170.3	1.461
#1	.0020	.3312	-.5373	-.0055	.7491	.0841	.0001	237.4
#2	.0025	.3332	-.4549	-.0074	.7458	.0832	-.0003	242.7
#3	.0041	.3146	-.5601	-.0063	.7412	.0837	-.0001	244.1

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0006**	**3.007**	**.0028**	**.3776**	**.3614**	**5.543**	**.0941**
Stddev	.0001	.0002	.023	.0012	.0012	.0234	.048	.0013
%RSD	159.6	29.92	.7692	41.06	.3190	6.483	.8655	1.352
#1	.0000	.0005	2.981	.0023	.3783	.3779	5.543	.0951
#2	-.0001	.0007	3.022	.0020	.3784	.3717	5.494	.0945
#3	-.0001	.0004	3.019	.0041	.3763	.3346	5.590	.0926

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**38.08**	**45.11**	**.3350**	**-.0008**	**202.1**	**.0068**	**.0578**	**.0027**
Stddev	.85	.16	.0022	.0000	1.2	.0002	.0005	.0025
%RSD	2.238	.3590	.6665	5.627	.5882	3.609	.8272	92.04
#1	37.37	44.95	.3324	-.0007	202.9	.0067	.0581	.0014
#2	39.02	45.10	.3366	-.0008	200.8	.0067	.0581	.0056
#3	37.85	45.28	.3359	-.0008	202.8	.0071	.0573	.0011

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**52.87**	**.0194**	**.0013**	**16.64**	**-.0020**	**.2140**	**.0075**	**.0033**
Stddev	.14	.0006	.0045	.10	.0009	.0048	.0003	.0019
%RSD	.2646	2.856	332.4	.6089	46.29	2.235	4.663	59.20
#1	53.03	.0193	.0059	16.52	-.0023	.2117	.0073	.0050
#2	52.80	.0190	.0012	16.70	-.0009	.2108	.0079	.0036
#3	52.78	.0200	-.0030	16.68	-.0027	.2195	.0073	.0012

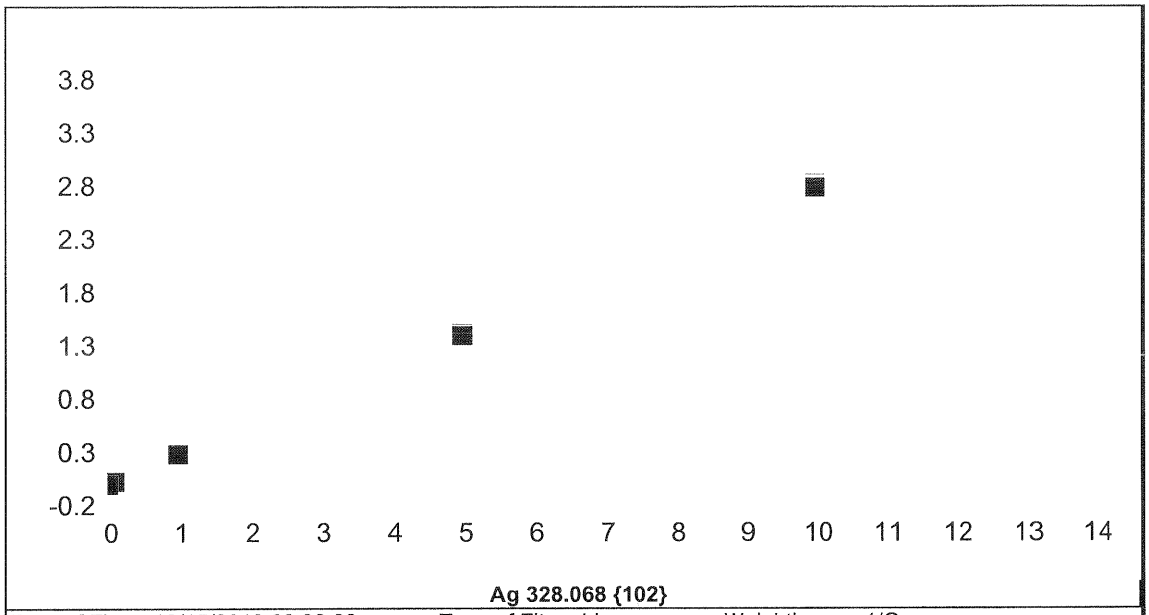
Sample Name: SB21844-05 Acquired: 12/15/2010 14:13:52 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: MW-4 (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0021**	**.0301**
Stddev	.0004	.0005
%RSD	20.05	1.689
#1	.0025	.0306
#2	.0017	.0302
#3	.0022	.0296

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**200.37**	**61.349**	**355.83**
Stddev	.90	2.024	13.59
%RSD	.44765	3.2986	3.8198
#1	201.37	63.188	371.09
#2	200.11	59.181	345.03
#3	199.63	61.678	351.37

Inorganics
Method 6010B

Standards Data

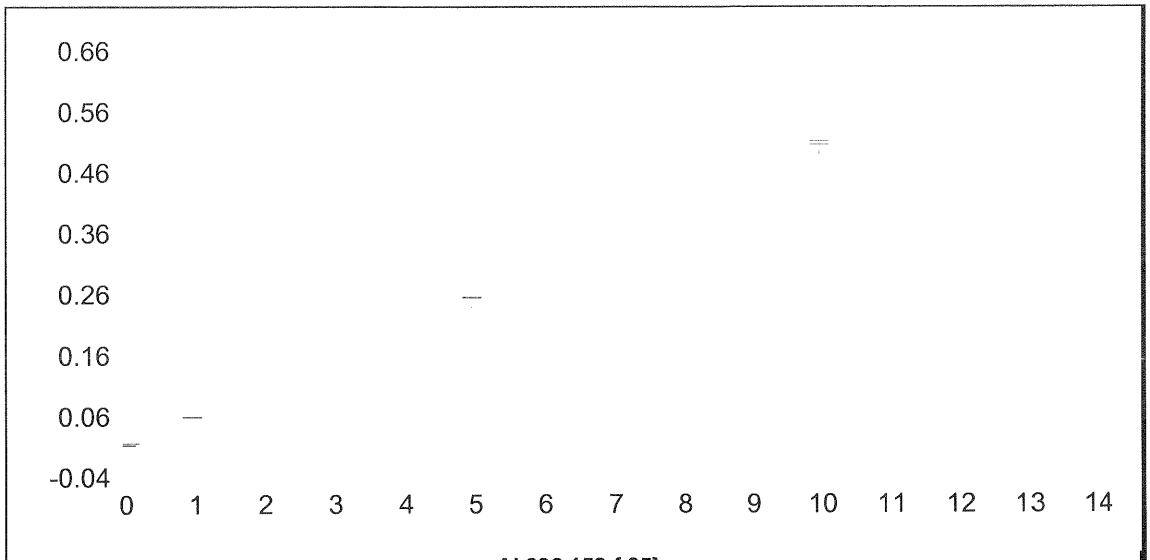


Ag 328.068 {102}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.005023	Re-Slope:	1.000000
A1 (Gain):	0.280158	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999965	Status:	OK.
Std Error of Est:	0.016530		
MDL:	0.049589		
MQL:	0.165297		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	-.00502	.001	1
SEQ-10K099	10.000	9.9701	-.030	-.299	2.7597	.028	1
SEQ-10L009	.10000	.10350	.003	3.50	.02369	.000	1
SEQ-10L009	1.0000	1.0282	.028	2.82	.28019	.002	1
SEQ-10L021	.01000	.01091	.001	9.11	-.00200	.000	1
SEQ-10L009	5.0000	4.9972	-.003	-.055	1.3807	.015	1

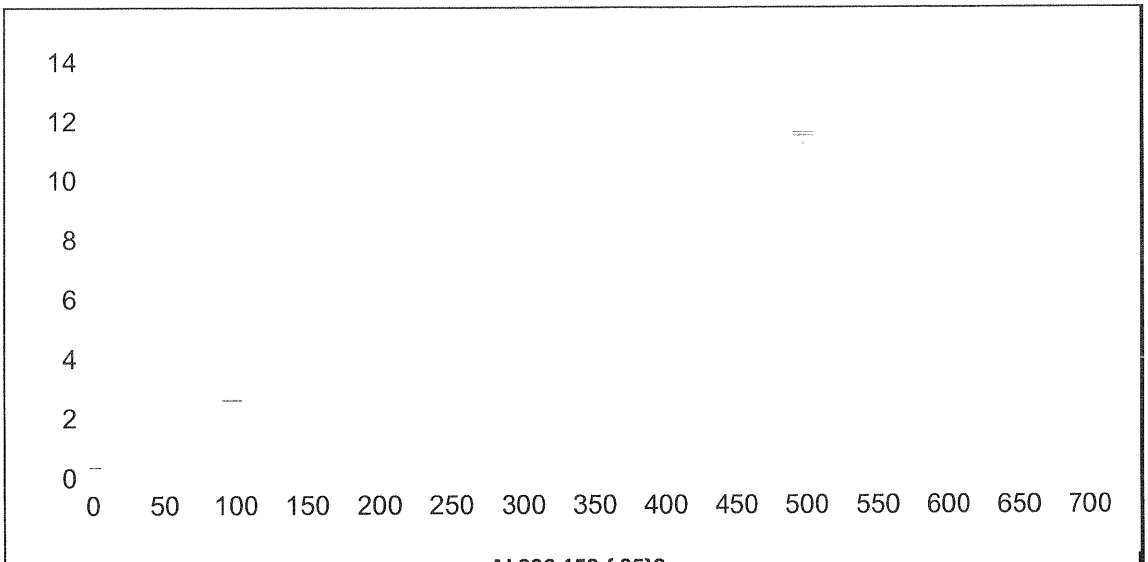


Al 396.152 { 85}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.004846	Re-Slope:	1.000000
A1 (Gain):	0.049410	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999910	Status:	OK.
Std Error of Est:	0.026965		
MDL:	0.080894		
MQL:	0.269648		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00001	.000	.000	-.00485	.000	1
SEQ-10K099	10.000	10.082	.082	.818	.49330	.003	1
SEQ-10L009	.10000	.10144	.001	1.44	.00017	.000	1
SEQ-10L009	1.0000	.98010	-.020	-1.99	.04358	.000	1
SEQ-10L021	.05000	.04225	-.008	-15.5	-.00276	.000	1
SEQ-10L009	5.0000	4.9444	-.056	-1.11	.23946	.001	1

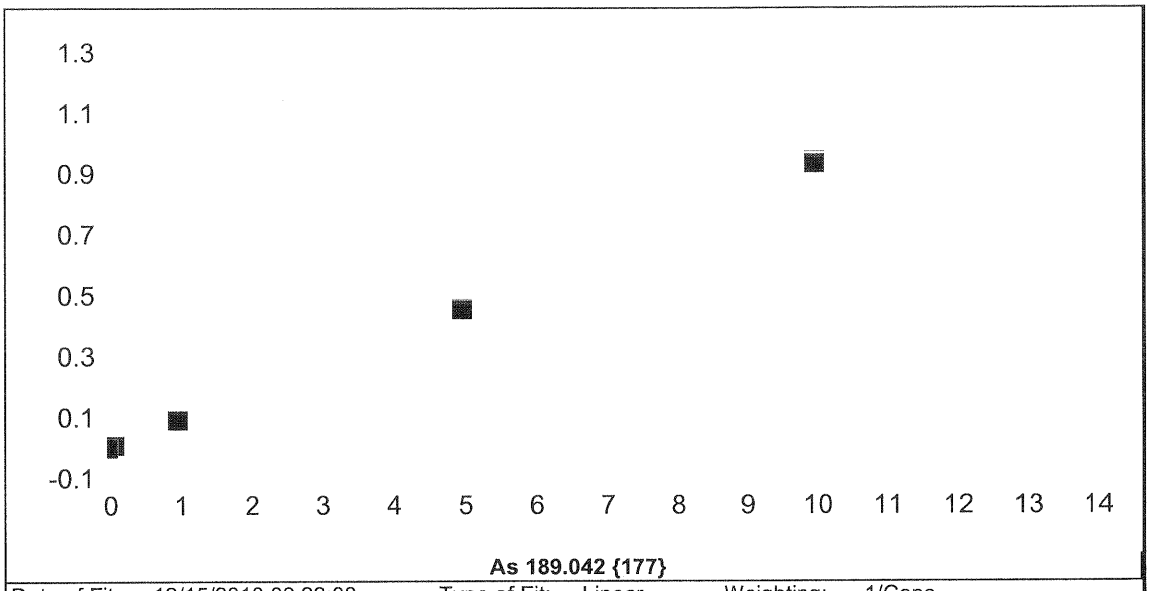


Al 396.152 { 85}2

Date of Fit:	12/15/2010 09:48:31	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002074	Re-Slope:	1.000000
A1 (Gain):	0.022478	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999910	Status:	OK.
Std Error of Est:	0.154651		
MDL:	0.463952		
MQL:	1.546506		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
SEQ-10K099	10.000	10.499	.499	4.99	.23806	.003	1
SEQ-10L009	1.0000	1.0618	.062	6.18	.02594	.001	1
Blank	.00000	-.00012	.000	.000	.00207	.001	1
SEQ-10L009	5.0000	5.1217	.122	2.43	.11720	.002	1
SEQ-10L021	100.00	101.64	1.64	1.64	2.2867	.017	1
SEQ-10L021	500.00	499.42	-.584	-.117	11.228	.061	1
SEQ-10L015	50.000	48.263	-1.74	-3.47	1.0869	.005	1

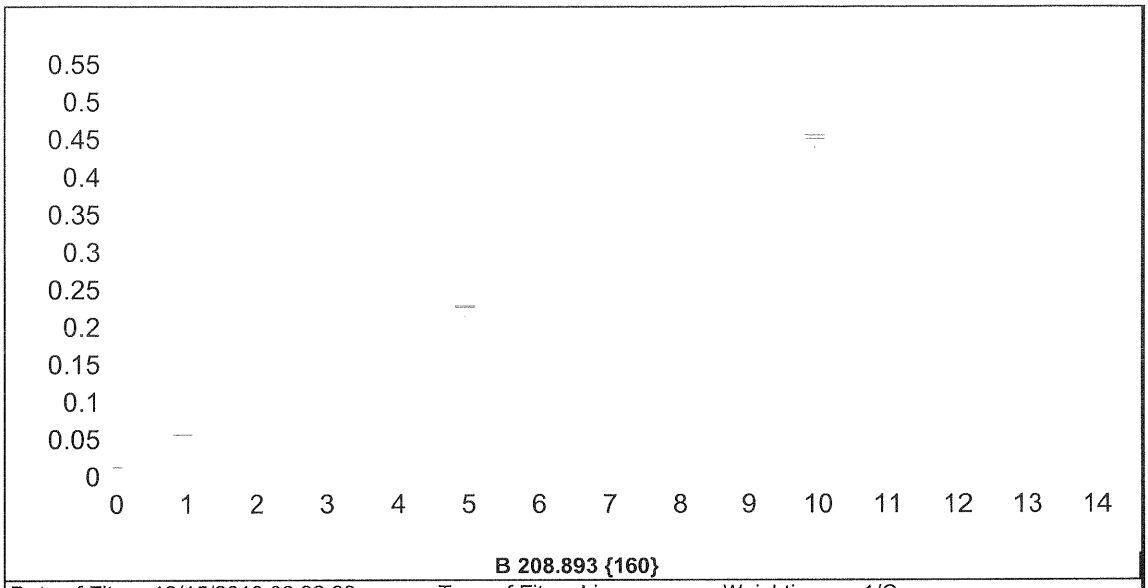


As 189.042 {177}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000747	Re-Slope:	1.000000
A1 (Gain):	0.092569	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999919	Status:	OK.
Std Error of Est:	0.025507		
MDL:	0.076521		
MQL:	0.255069		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	-.00075	.000	1
SEQ-10K099	10.000	10.093	.093	.933	.93435	.007	1
SEQ-10L009	.10000	.10038	.000	.380	.00855	.000	1
SEQ-10L009	1.0000	.99832	-.002	-.168	.09174	.000	1
SEQ-10L021	.00800	.00729	-.001	-8.91	-.00007	.000	1
SEQ-10L009	5.0000	4.9088	-.091	-1.82	.45404	.001	1

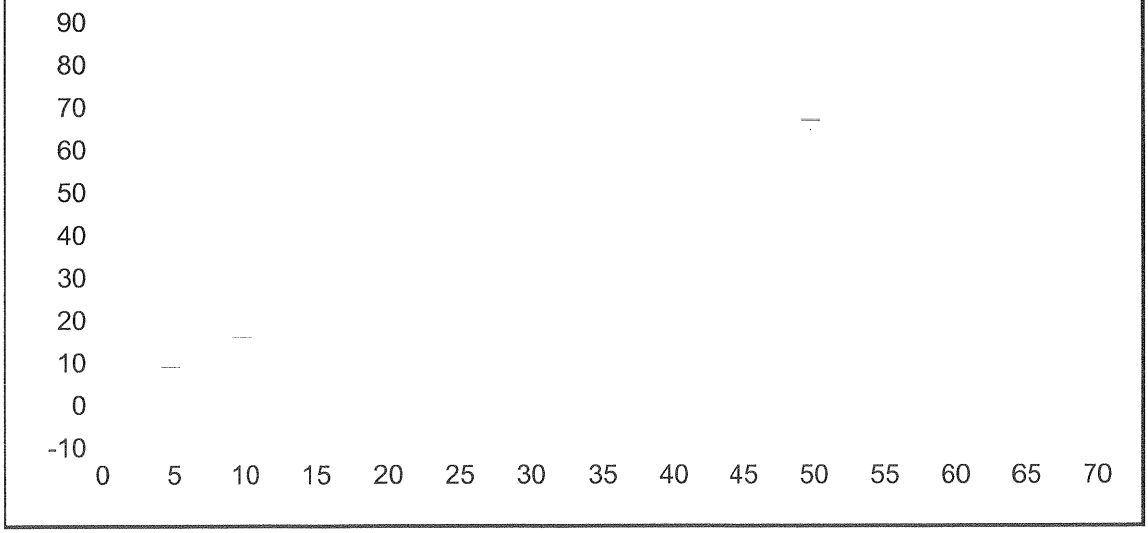


B 208.893 {160}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000292	Re-Slope:	1.000000
A1 (Gain):	0.043600	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999911	Status:	OK.
Std Error of Est:	0.030937		
MDL:	0.092810		
MQL:	0.309365		

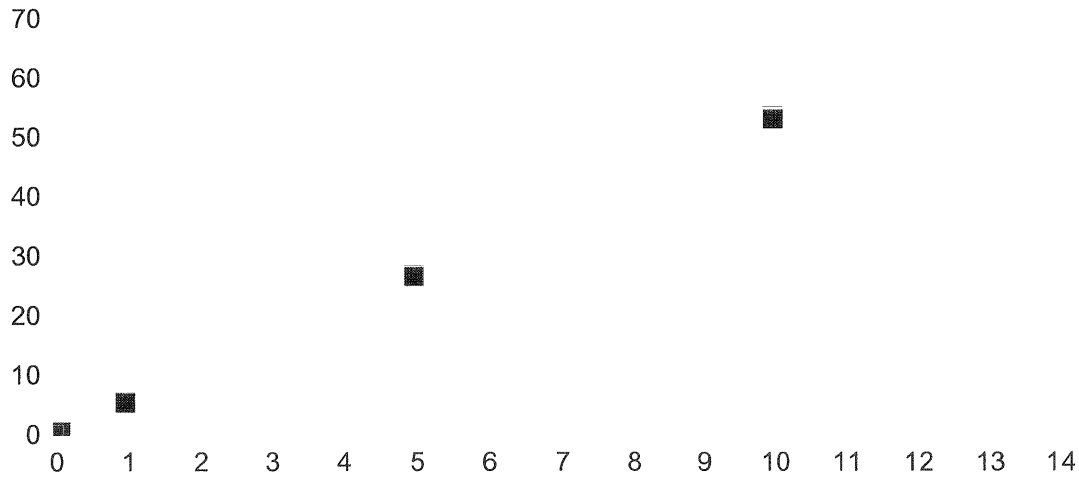
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00001	.000	.000	.00029	.000	1
SEQ-10K099	10.000	10.099	.099	.990	.44061	.002	1
SEQ-10L009	1.0000	.98763	-.012	-1.24	.04335	.000	1
SEQ-10L021	.10000	.09321	-.007	-6.79	.00436	.000	1
SEQ-10L009	5.0000	4.9201	-.080	-1.60	.21481	.001	1



Ba 455.403 { 74}

Date of Fit:	12/15/2010 09:29:44	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000155		Re-Slope:	1.000000	
A1 (Gain):	1.309518		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999684		Status:	OK.	
Std Error of Est:	0.091472				
MDL:	0.274416				
MQL:	0.914721				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00015	.001	1
SEQ-10L009	.10000	.10829	.008	8.29	.14197	.001	1
SEQ-10L009	1.0000	1.0660	.066	6.60	1.3961	.005	1
SEQ-10L021	.01000	.01129	.001	12.9	.01494	.001	1
SEQ-10K099	10.000	10.443	.443	4.43	13.676	.033	1
SEQ-10L009	5.0000	5.1871	.187	3.74	6.7928	.017	1
SEQ-10L015	50.000	49.294	-.706	-1.41	64.552	.198	1

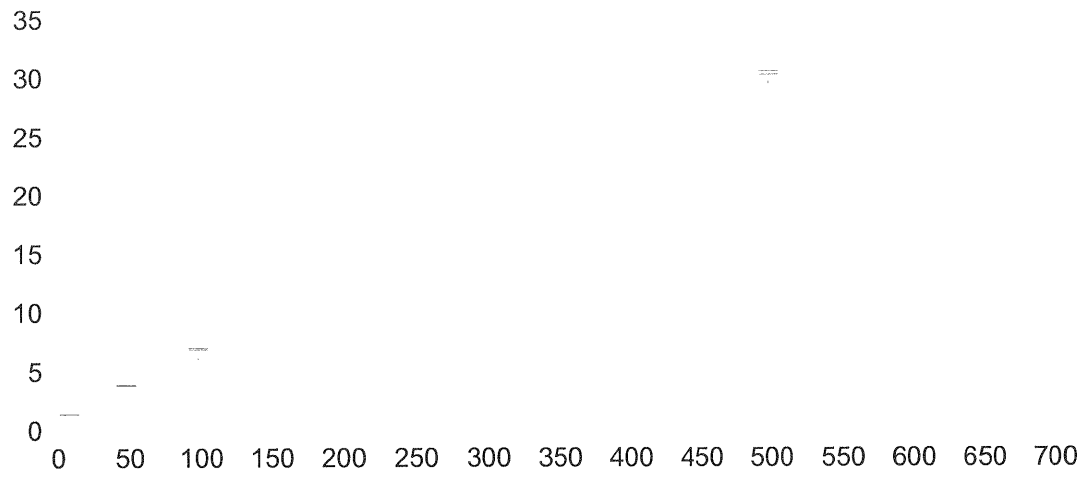


Be 313.042 {107}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	0.000977		Re-Slope:	1.000000	
A1 (Gain):	5.310926		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999987		Status:	OK.	
Std Error of Est:	0.010356				
MDL:	0.031067				
MQL:	0.103557				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00098	.000	1
SEQ-10K099	10.000	9.9820	-.018	-.180	53.025	.464	1
SEQ-10L009	.10000	.10325	.003	3.25	.54942	.004	1
SEQ-10L009	1.0000	1.0169	.017	1.69	5.4030	.053	1

SEQ-10L021	.00400	.00389	.000	-2.81	.02163	.001	1
SEQ-10L009	5.0000	4.9979	-.002	-.043	26.550	.135	1

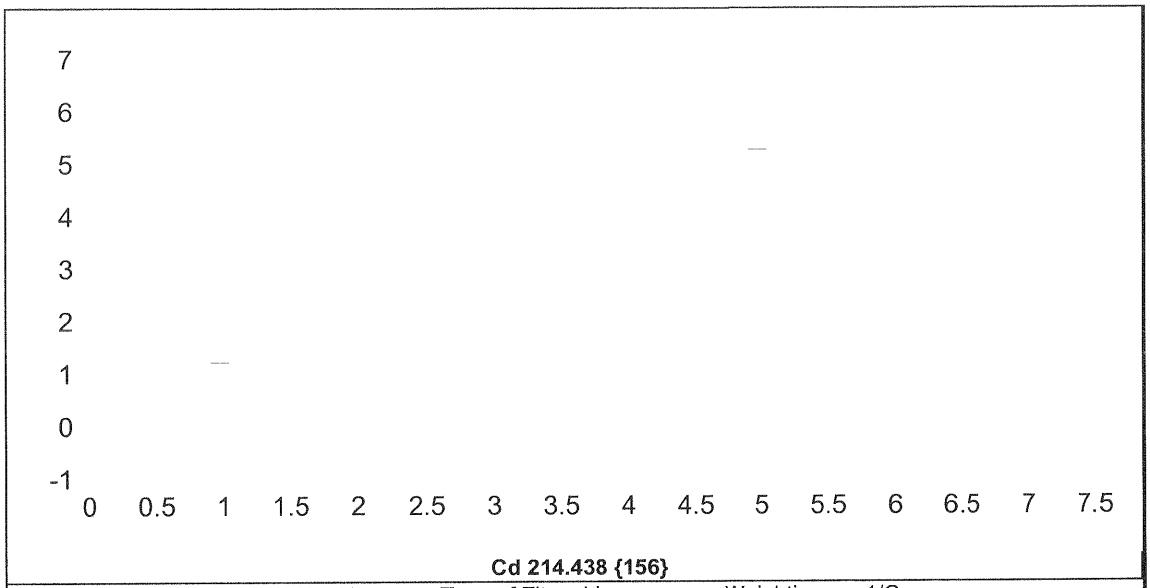


Ca 317.933 {105}

Date of Fit:	12/15/2010 09:48:31	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002156	Re-Slope:	1.000000
A1 (Gain):	0.059782	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999889	Status:	OK.
Std Error of Est:	0.157160		
MDL:	0.471479		
MQL:	1.571597		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	-.00005	.000	.000	.00215	.000	1
SEQ-10K099	10.000	10.307	.307	3.07	.61832	.006	1
SEQ-10L009	1.0000	1.0663	.066	6.63	.06590	.001	1
SEQ-10L021	.20000	.21748	.017	8.74	.01516	.001	1
SEQ-10L009	5.0000	5.1512	.151	3.02	.31010	.003	1
SEQ-10L021	100.00	102.73	2.73	2.73	6.1438	.048	1
SEQ-10L021	500.00	495.78	-4.22	-.844	29.641	.160	1
SEQ-10L015	50.000	50.945	.945	1.89	3.0477	.027	1

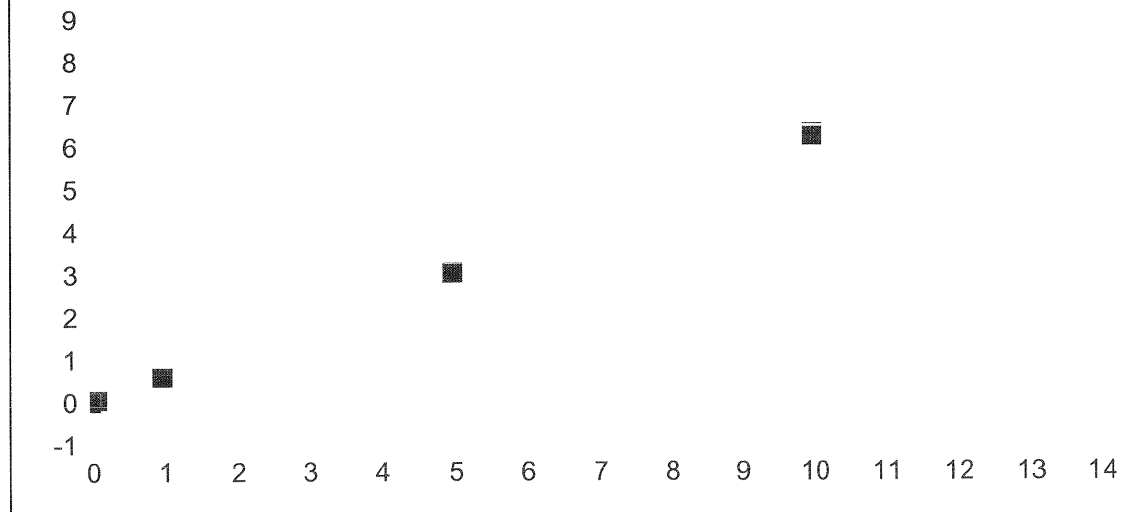


Cd 214.438 {156}

Date of Fit:	12/15/2010 09:15:49	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000333	Re-Slope:	1.000000
A1 (Gain):	1.022063	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999952	Status:	OK.
Std Error of Est:	0.016951		
MDL:	0.050852		
MQL:	0.169505		

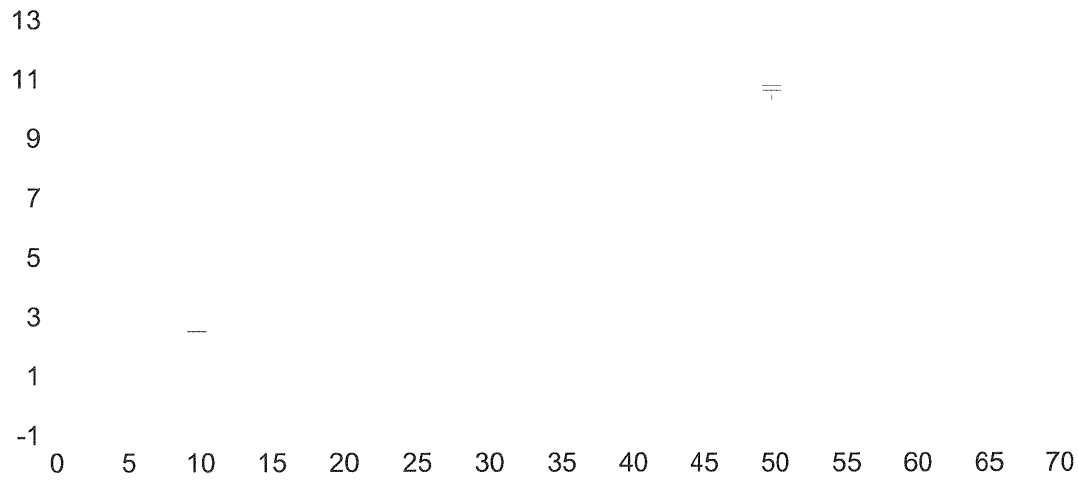
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
SEQ-10L009	.10000	.10322	.003	3.22	.10516	.000	1
SEQ-10L009	1.0000	1.0191	.019	1.91	1.0412	.002	1
SEQ-10L021	.00500	.00477	.000	-4.68	.00454	.000	1
SEQ-10L009	5.0000	4.9780	-.022	-.441	5.0875	.004	1



Co 228.616 {147}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	-0.000485		Re-Slope:	1.000000	
A1 (Gain):	0.617342		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999913	Status:	OK.		
Std Error of Est:	0.026607				
MDL:	0.079822				
MQL:	0.266074				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	-.00048	.000	1
SEQ-10K099	10.000	10.103	.103	1.03	6.2519	.052	1
SEQ-10L009	.10000	.09805	-.002	-1.95	.06020	.000	1
SEQ-10L009	1.0000	.97914	-.021	-2.09	.60551	.001	1
SEQ-10L021	.01000	.00954	.000	-4.58	.00542	.000	1
SEQ-10L009	5.0000	4.9202	-.080	-1.60	3.0446	.004	1

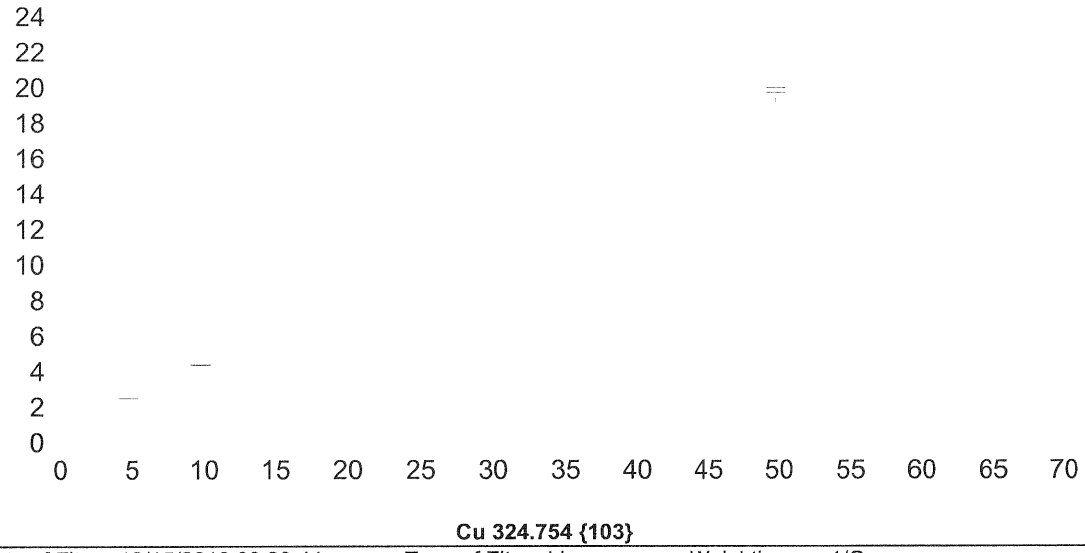


Cr 267.716 {125}

Date of Fit:	12/15/2010 09:29:44	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	-0.000190		Re-Slope:	1.000000	
A1 (Gain):	0.210168		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999674	Status:	OK.		
Std Error of Est:	0.092895				
MDL:	0.278686				
MQL:	0.928953				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	-.00019	.000	1
SEQ-10K099	10.000	10.412	.412	4.12	2.1881	.012	1
SEQ-10L009	.10000	.10896	.009	8.96	.02271	.000	1
SEQ-10L009	1.0000	1.0723	.072	7.23	.22518	.001	1
SEQ-10L021	.01000	.01115	.001	11.5	.00215	.000	1
SEQ-10L009	5.0000	5.2207	.221	4.41	1.0970	.002	1

SEQ-10L015	50.000	49.285	-.715	-1.43	10.358	.084	1

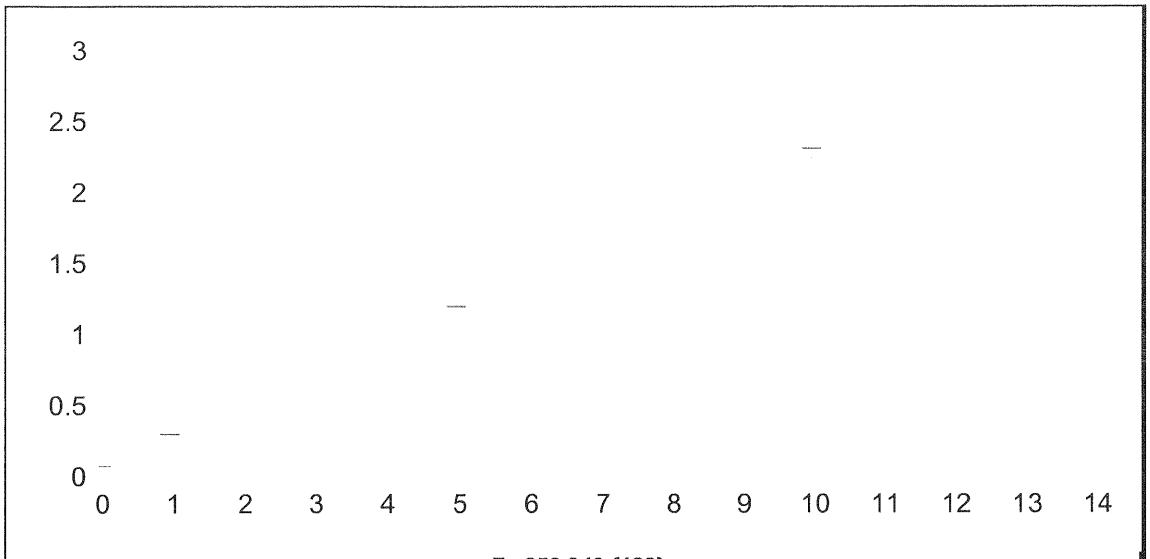


Cu 324.754 {103}

Date of Fit:	12/15/2010 09:29:44	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008106	Re-Slope:	1.000000
A1 (Gain):	0.385964	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999983	Status:	OK.
Std Error of Est:	0.021272		
MDL:	0.063815		
MQL:	0.212715		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00811	.000	1
SEQ-10K099	10.000	9.9143	-.086	-.857	3.8347	.014	1
SEQ-10L009	.10000	.10219	.002	2.19	.04755	.000	1
SEQ-10L009	1.0000	1.0368	.037	3.68	.40829	.001	1
SEQ-10L021	.01000	.00931	-.001	-6.91	.01170	.000	1
SEQ-10L009	5.0000	4.9917	-.008	-.167	1.9347	.011	1
SEQ-10L015	50.000	50.056	.056	.111	19.328	.133	1

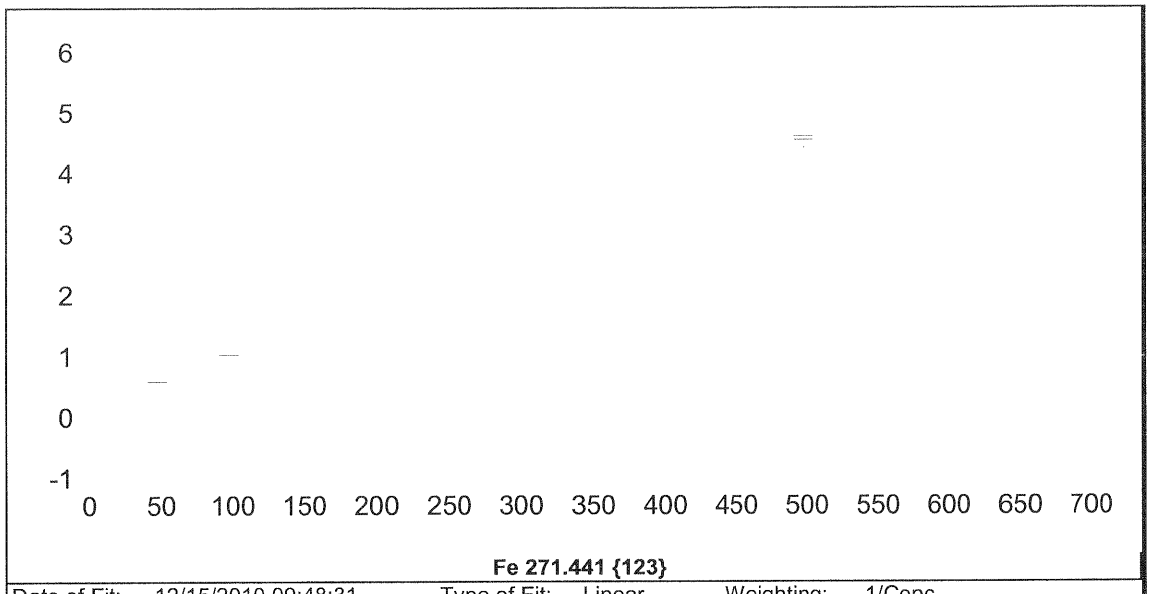


Fe 259.940 {129}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000435	Re-Slope:	1.000000
A1 (Gain):	0.225335	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999952	Status:	OK.
Std Error of Est:	0.019698		
MDL:	0.059093		
MQL:	0.196976		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	-.00001	.000	.000	.00043	.000	1
SEQ-10K099	10.000	9.9533	-.047	-.467	2.2433	.003	1
SEQ-10L009	.10000	.10566	.006	5.66	.02424	.000	1
SEQ-10L009	1.0000	1.0255	.025	2.55	.23151	.002	1
SEQ-10L009	5.0000	5.0124	.012	.248	1.1299	.004	1
SEQ-10L021	.03000	.03316	.003	10.5	.00791	.000	1

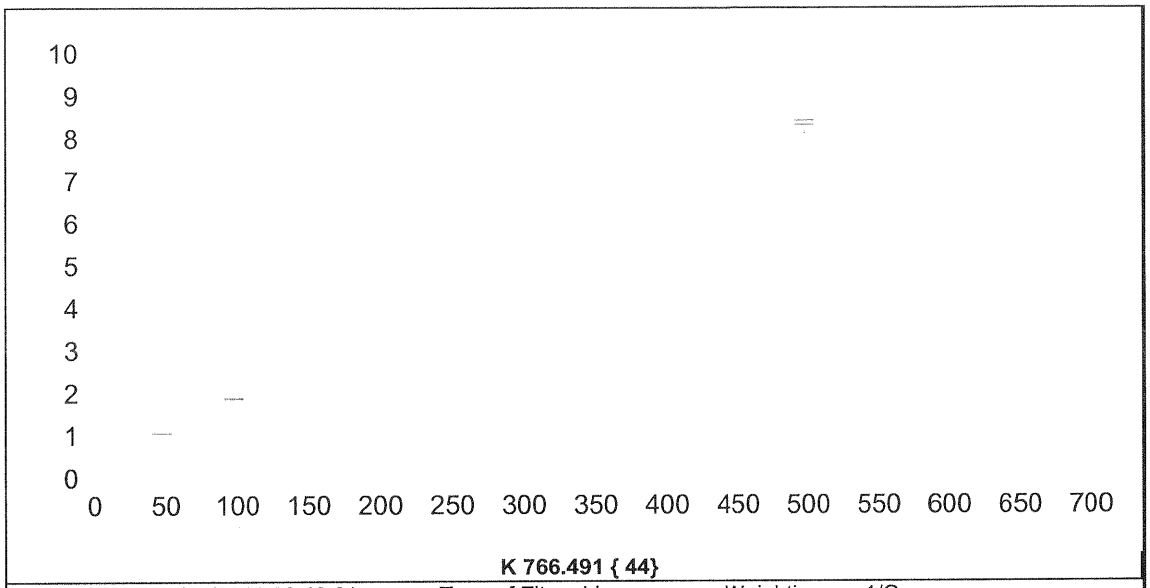


Fe 271.441 {123}

Date of Fit:	12/15/2010 09:48:31	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000870	Re-Slope:	1.000000
A1 (Gain):	0.008825	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999928	Status:	OK.
Std Error of Est:	0.138755		
MDL:	0.416266		
MQL:	1.387552		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
SEQ-10K099	10.000	10.612	.612	6.12	.09278	.000	1
SEQ-10L009	1.0000	1.0816	.082	8.16	.00868	.000	1
SEQ-10L015	50.000	49.210	-.790	-1.58	.43340	.000	1
Blank	.00000	-.00018	.000	.000	-.00087	.000	1
SEQ-10L009	5.0000	5.3348	.335	6.70	.04621	.000	1
SEQ-10L021	100.00	98.766	-1.23	-1.23	.87072	.004	1
SEQ-10L021	500.00	501.00	.996	.199	4.4203	.030	1

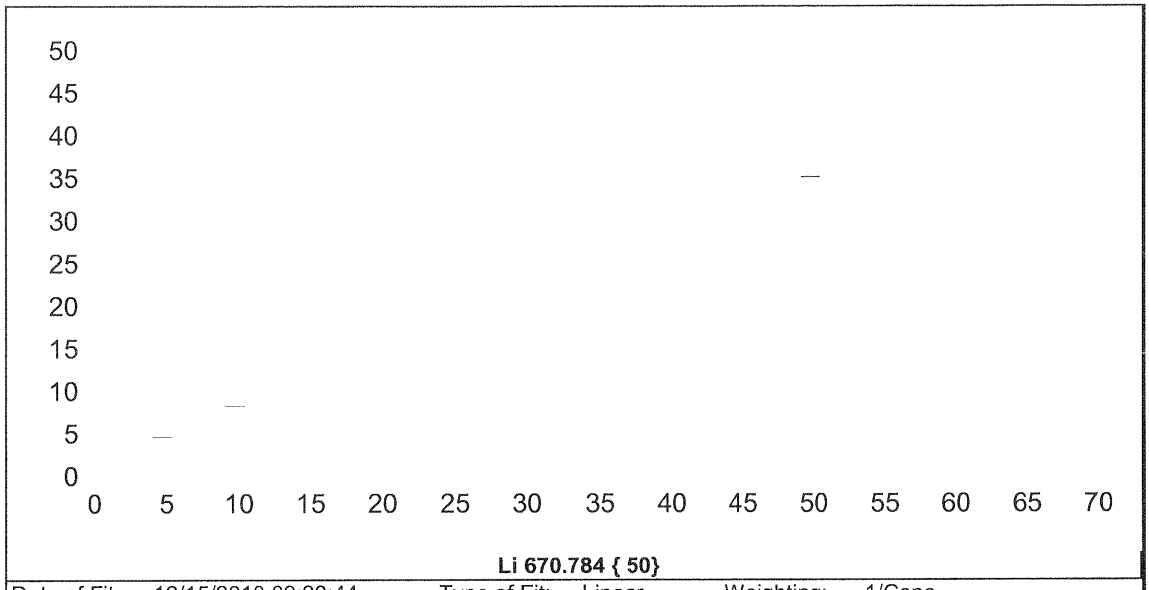


K 766.491 { 44}

Date of Fit:	12/15/2010 09:48:31	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007098	Re-Slope:	1.000000
A1 (Gain):	0.016289	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999965	Status:	OK.
Std Error of Est:	0.088471		
MDL:	0.265414		
MQL:	0.884712		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00020	.000	.000	.00710	.002	1
SEQ-10K099	10.000	9.7448	-.255	-2.55	.16583	.001	1
SEQ-10L021	1.0000	.93784	-.062	-6.22	.02237	.001	1
SEQ-10L009	5.0000	4.6825	-.318	-6.35	.08337	.001	1
SEQ-10L009	1.0000	.93512	-.065	-6.49	.02233	.002	1
SEQ-10L021	100.00	100.59	.591	.591	1.6456	.013	1
SEQ-10L021	500.00	499.47	-.529	-.106	8.1430	.047	1
SEQ-10L015	50.000	50.637	.637	1.27	.83193	.006	1

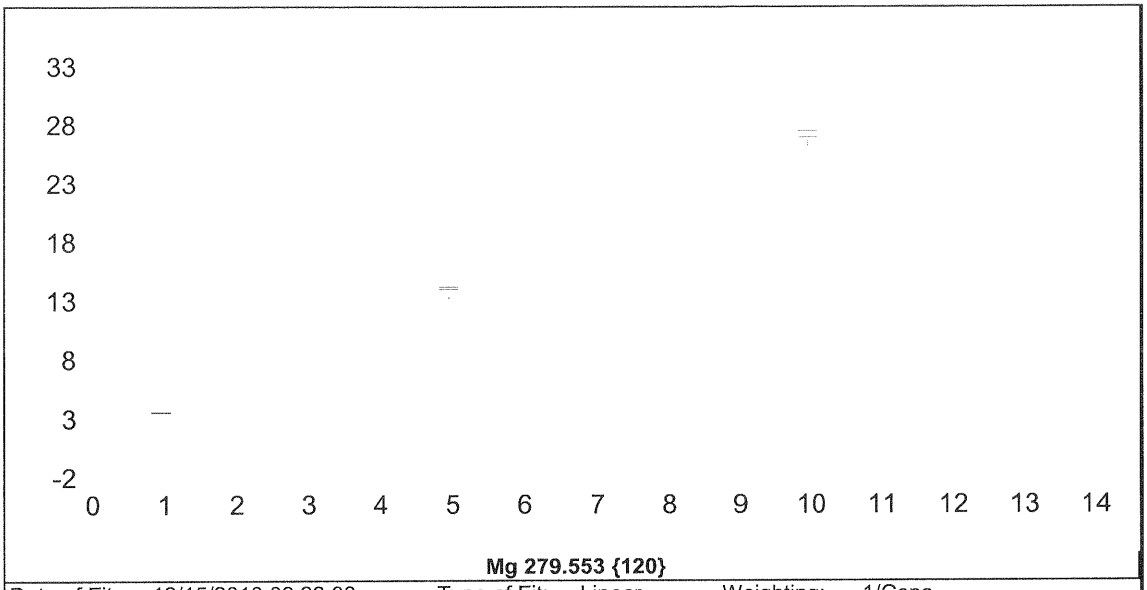


Li 670.784 { 50}

Date of Fit: 12/15/2010 09:29:44 Type of Fit: Linear Weighting: 1/Conc

A0 (Offset):	0.004832	Re-Slope:	1.000000
A1 (Gain):	0.687396	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999852	Status:	OK.
Std Error of Est:	0.062548		
MDL:	0.187643		
MQL:	0.625478		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	-.00001	.000	.000	.00483	.002	1
SEQ-10K099	10.000	10.347	.347	3.47	7.1173	.010	1
SEQ-10L009	.10000	.10382	.004	3.82	.07619	.001	1
SEQ-10L009	1.0000	1.0182	.018	1.82	.70472	.006	1
SEQ-10L021	.05000	.05340	.003	6.81	.04154	.001	1
SEQ-10L009	5.0000	5.1057	.106	2.11	3.5145	.011	1
SEQ-10L015	50.000	49.522	-.478	-.956	34.046	.043	1

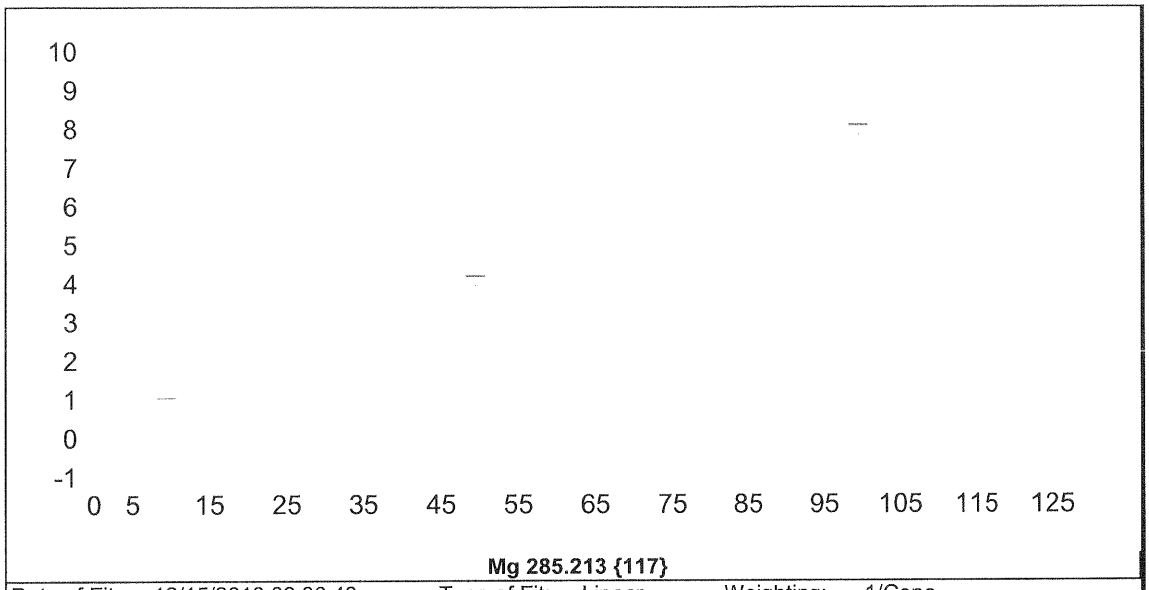


Mg 279.553 {120}

Date of Fit: 12/15/2010 09:22:38 Type of Fit: Linear Weighting: 1/Conc

A0 (Offset):	0.000173	Re-Slope:	1.000000
A1 (Gain):	2.653290	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999930	Status:	OK.
Std Error of Est:	0.023769		
MDL:	0.071307		
MQL:	0.237691		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00016	.000	1
SEQ-10K099	10.000	9.9510	-.049	-.490	26.403	.277	1
SEQ-10L009	.10000	.10679	.007	6.79	.28352	.002	1
SEQ-10L009	1.0000	1.0371	.037	3.71	2.7518	.034	1
SEQ-10L021	.02000	.02191	.002	9.56	.05831	.001	1
SEQ-10L009	5.0000	5.0032	.003	.064	13.275	.105	1

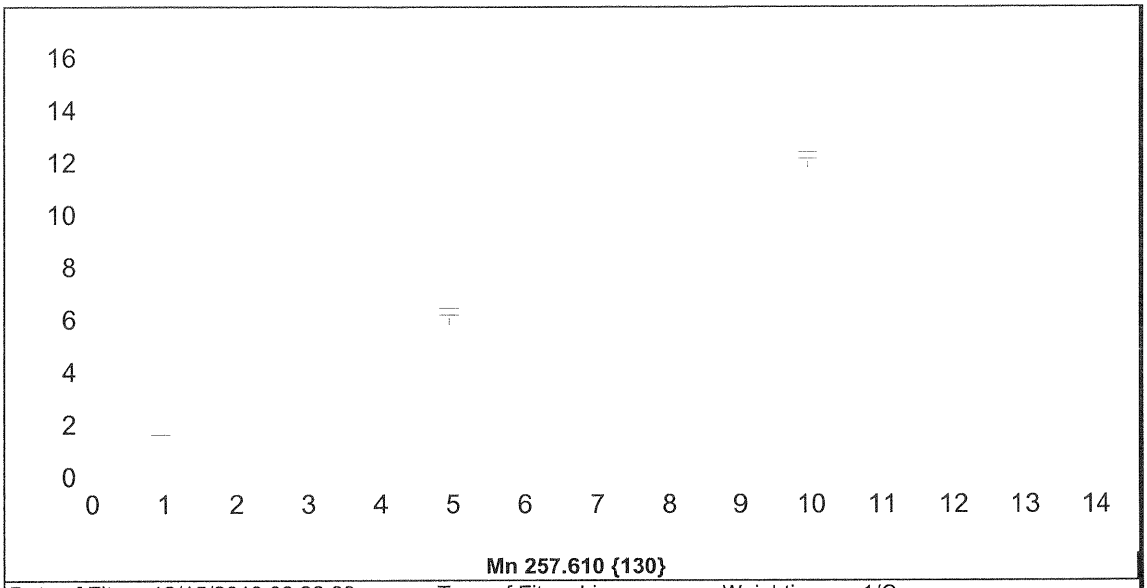


Mg 285.213 {117}

Date of Fit:	12/15/2010 09:36:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000012	Re-Slope:	1.000000
A1 (Gain):	0.078735	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999989	Status:	OK.
Std Error of Est:	0.030286		
MDL:	0.090857		
MQL:	0.302856		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
SEQ-10K099	10.000	10.019	.019	.191	.78887	.003	1
SEQ-10L009	1.0000	1.0409	.041	4.09	.08197	.001	1
Blank	.00000	-.00004	.000	.000	.00001	.001	1
SEQ-10L009	5.0000	4.9780	-.022	-.440	.39195	.001	1
SEQ-10L021	100.00	99.726	-.274	-.274	7.8519	.019	1
SEQ-10L015	50.000	50.236	.236	.471	3.9553	.012	1

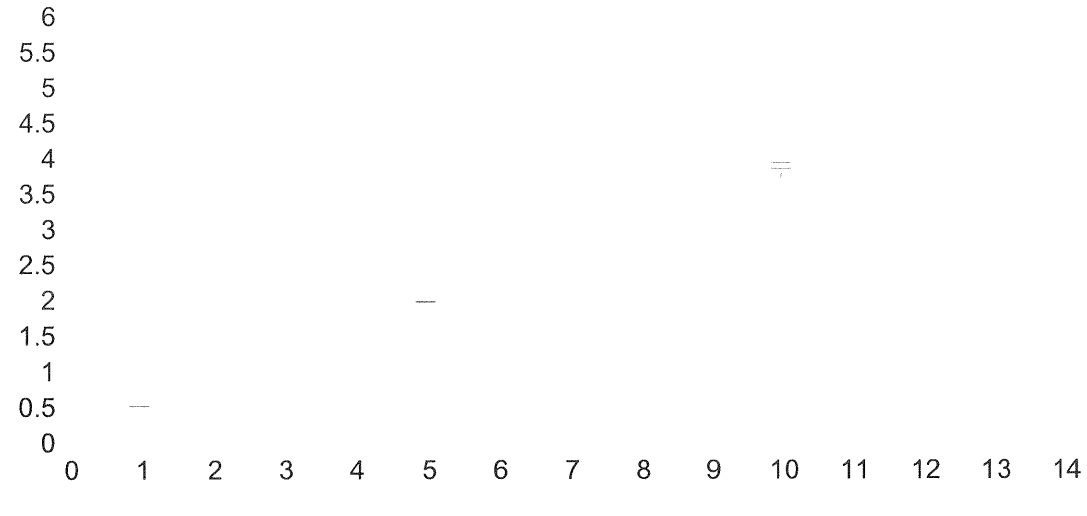


Mn 257.610 {130}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000667	Re-Slope:	1.000000
A1 (Gain):	1.195980	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999869	Status:	OK.
Std Error of Est:	0.032438		
MDL:	0.097314		
MQL:	0.324379		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00067	.000	1
SEQ-10K099	10.000	9.9658	-.034	-.342	11.920	.130	1
SEQ-10L009	.10000	.10834	.008	8.34	.13024	.001	1
SEQ-10L009	1.0000	1.0566	.057	5.66	1.2643	.007	1
SEQ-10L021	.00400	.00415	.000	3.73	.00563	.000	1
SEQ-10L009	5.0000	4.9691	-.031	-.617	5.9436	.136	1

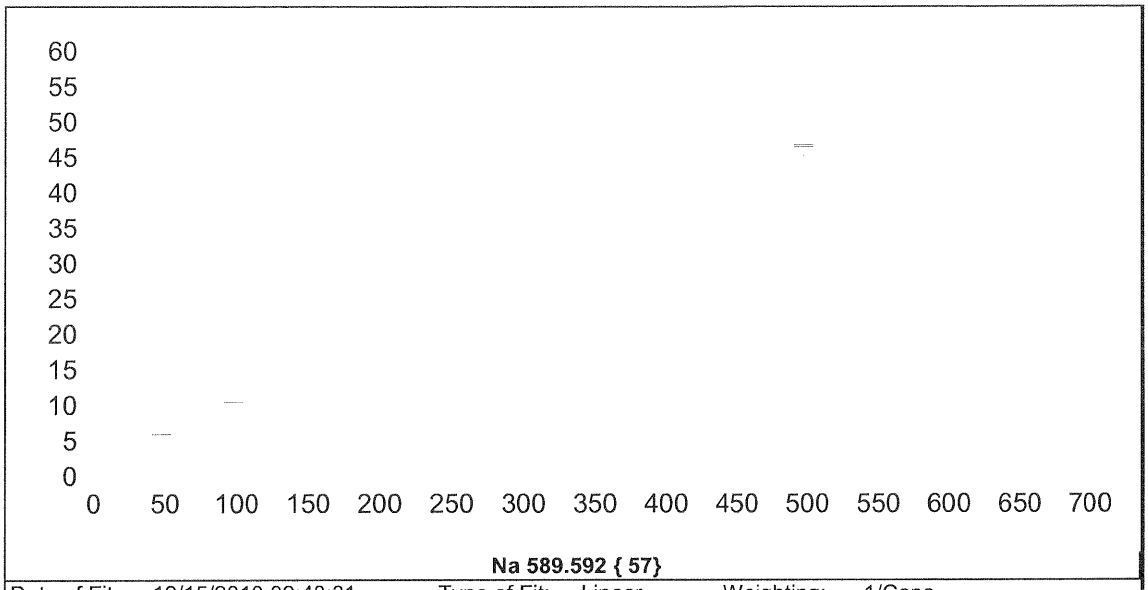


Mo 202.030 {166}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002140	Re-Slope:	1.000000
A1 (Gain):	0.373199	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999953	Status:	OK.
Std Error of Est:	0.019428		
MDL:	0.058285		
MQL:	0.194283		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00214	.000	1
SEQ-10K099	10.000	10.064	.064	.637	3.7579	.042	1
SEQ-10L009	.10000	.10094	.001	.944	.03981	.000	1
SEQ-10L009	1.0000	1.0019	.002	.185	.37603	.001	1
SEQ-10L021	.01000	.00842	-.002	-15.8	.00528	.000	1
SEQ-10L009	5.0000	4.9351	-.065	-1.30	1.8439	.003	1

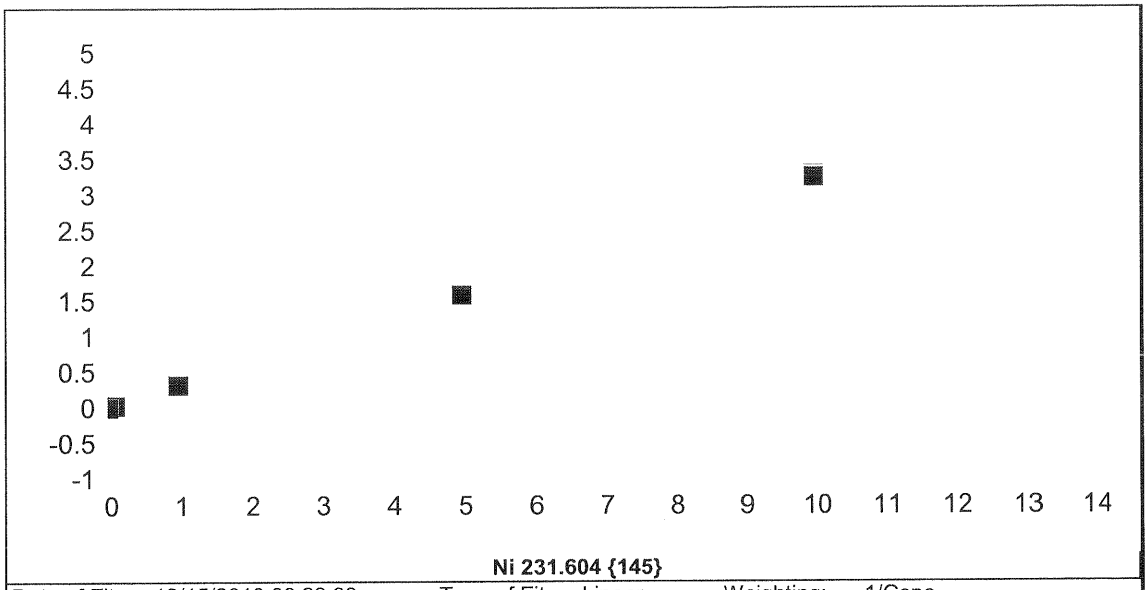


Na 589.592 { 57}

Date of Fit:	12/15/2010 09:48:31	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.012233	Re-Slope:	1.000000
A1 (Gain):	0.090763	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999972	Status:	OK.
Std Error of Est:	0.078793		
MDL:	0.236380		
MQL:	0.787932		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00004	.000	.000	.01224	.002	1
SEQ-10K099	10.000	9.9245	-.075	-.755	.91301	.001	1
SEQ-10L009	1.0000	.96403	-.036	-3.60	.09973	.002	1
SEQ-10L021	.50000	.48707	-.013	-2.59	.05644	.003	1
SEQ-10L009	5.0000	4.8228	-.177	-3.54	.44997	.001	1
SEQ-10L021	100.00	100.99	.995	.995	9.1788	.016	1
SEQ-10L021	500.00	498.47	-1.53	-.307	45.254	.149	1
SEQ-10L015	50.000	50.842	.842	1.68	4.6268	.007	1

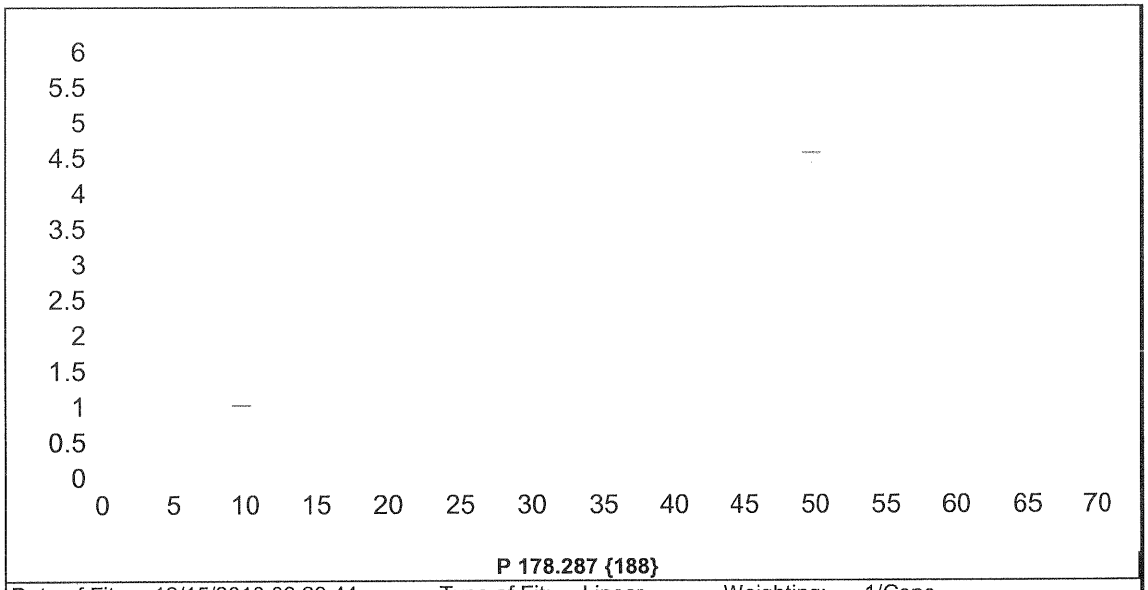


Ni 231.604 {145}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.002400	Re-Slope:	1.000000
A1 (Gain):	0.322320	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999946	Status:	OK.
Std Error of Est:	0.020868		
MDL:	0.062604		
MQL:	0.208681		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	-.00240	.000	1
SEQ-10K099	10.000	10.073	.073	.732	3.2439	.029	1
SEQ-10L009	.10000	.10059	.001	.587	.03002	.000	1
SEQ-10L009	1.0000	.99917	-.001	-.083	.31960	.001	1
SEQ-10L021	.01000	.01103	.001	10.3	.00115	.000	1
SEQ-10L009	5.0000	4.9260	-.074	-1.48	1.5851	.002	1

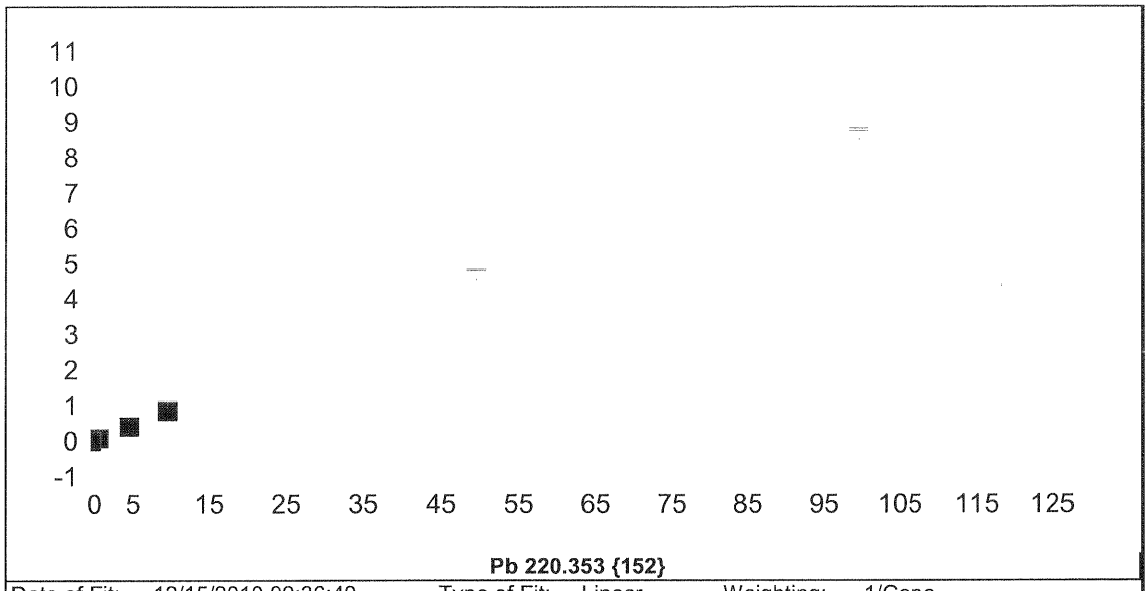


P 178.287 {188}

Date of Fit:	12/15/2010 09:29:44	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000600	Re-Slope:	1.000000
A1 (Gain):	0.088159	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999962	Status:	OK.
Std Error of Est:	0.031653		
MDL:	0.094958		
MQL:	0.316528		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00060	.000	1
SEQ-10K099	10.000	9.9954	-.005	-.046	.88178	.009	1
SEQ-10L009	.10000	.09999	.000	-.011	.00941	.000	1
SEQ-10L009	1.0000	.98239	-.018	-1.76	.08721	.000	1
SEQ-10L021	.05000	.04860	-.001	-2.79	.00488	.000	1
SEQ-10L015	50.000	50.167	.167	.334	4.4232	.009	1
SEQ-10L009	5.0000	4.8568	-.143	-2.86	.42877	.001	1

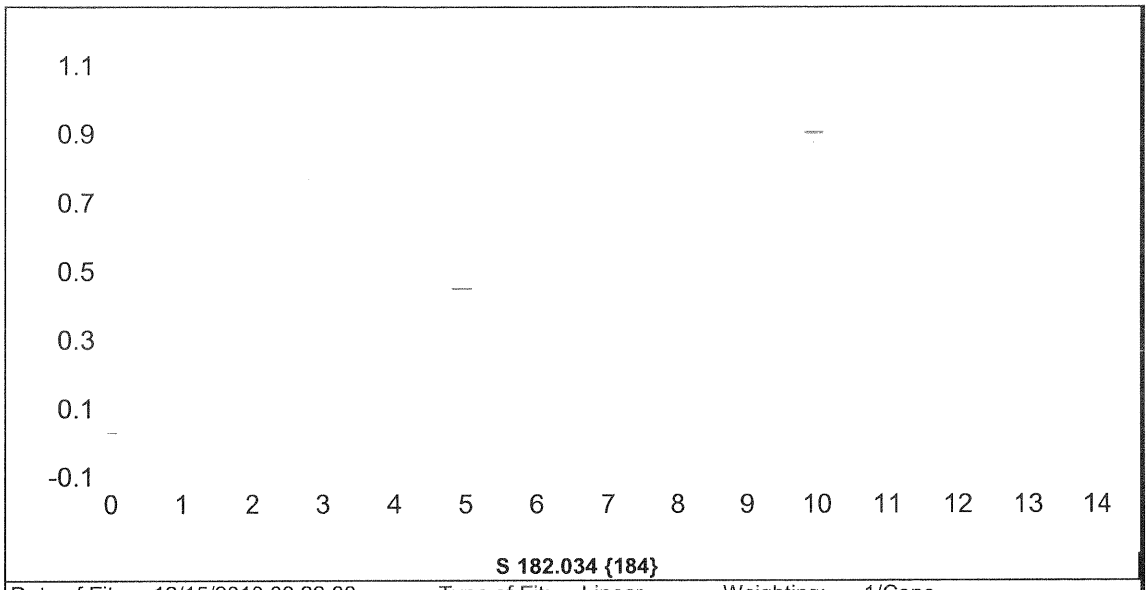


Pb 220.353 {152}

Date of Fit:	12/15/2010 09:36:40	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000982	Re-Slope:	1.000000
A1 (Gain):	0.086860	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999512	Status:	OK.
Std Error of Est:	0.164366		
MDL:	0.493097		
MQL:	1.643656		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	-.00098	.000	1
SEQ-10K099	10.000	9.8116	-.188	-1.88	.85111	.011	1
SEQ-10L009	.10000	.09822	-.002	-1.78	.00755	.000	1
SEQ-10L009	1.0000	.96873	-.031	-3.13	.08315	.000	1
SEQ-10L021	.01500	.01946	.004	29.7	.00071	.000	1
SEQ-10L009	5.0000	4.7955	-.204	-4.09	.41549	.001	1
SEQ-10L021	100.00	98.070	-1.93	-1.93	8.5174	.032	1
SEQ-10L015	50.000	52.352	2.35	4.70	4.5463	.023	1

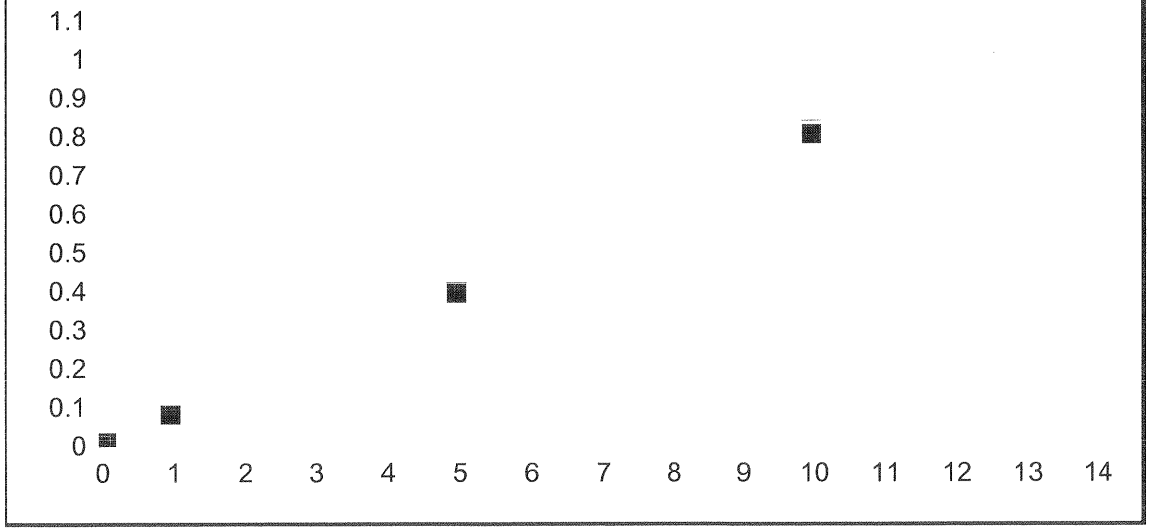


S 182.034 {184}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000214	Re-Slope:	1.000000
A1 (Gain):	0.086429	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999839	Status:	OK.
Std Error of Est:	0.041601		
MDL:	0.124803		
MQL:	0.416010		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00021	.000	1
SEQ-10K099	10.000	10.136	.136	1.36	.87627	.002	1
SEQ-10L009	1.0000	.98166	-.018	-1.83	.08506	.000	1
SEQ-10L021	.10000	.10294	.003	2.94	.00911	.000	1
SEQ-10L009	5.0000	4.8793	-.121	-2.41	.42192	.001	1

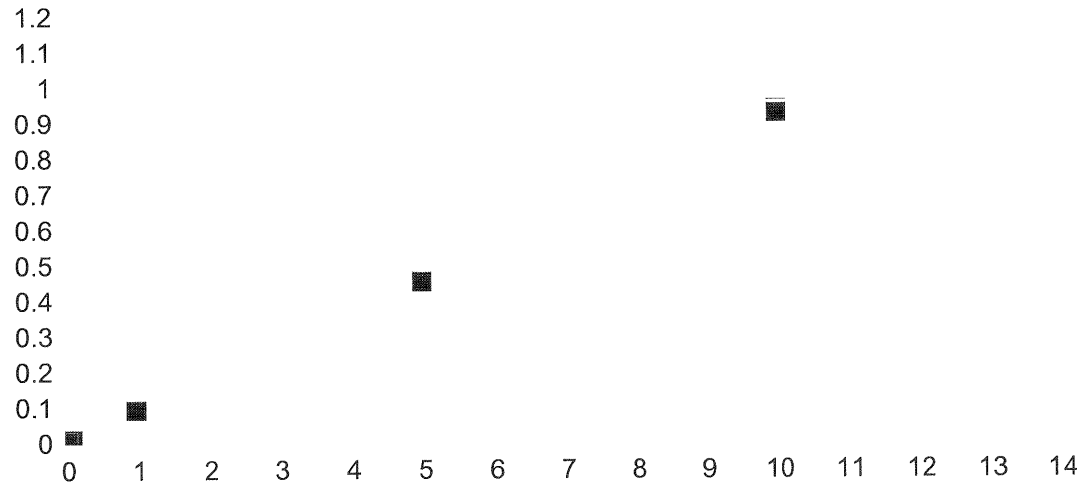


Sb 206.833 {162}

Date of Fit: 12/15/2010 09:22:38 Type of Fit: Linear Weighting: 1/Conc

A0 (Offset):	0.001460	Re-Slope:	1.000000
A1 (Gain):	0.079772	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999868	Status:	OK.
Std Error of Est:	0.032569		
MDL:	0.097707		
MQL:	0.325689		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00001	.000	.000	.00146	.000	1
SEQ-10K099	10.000	10.083	.083	.827	.80616	.009	1
SEQ-10L009	.10000	.10232	.002	2.32	.00963	.000	1
SEQ-10L009	1.0000	.99486	-.005	-.514	.08086	.000	1
SEQ-10L021	.01200	.00667	-.005	-44.4	.00199	.000	1
SEQ-10L009	5.0000	4.9254	-.075	-1.49	.39456	.002	1



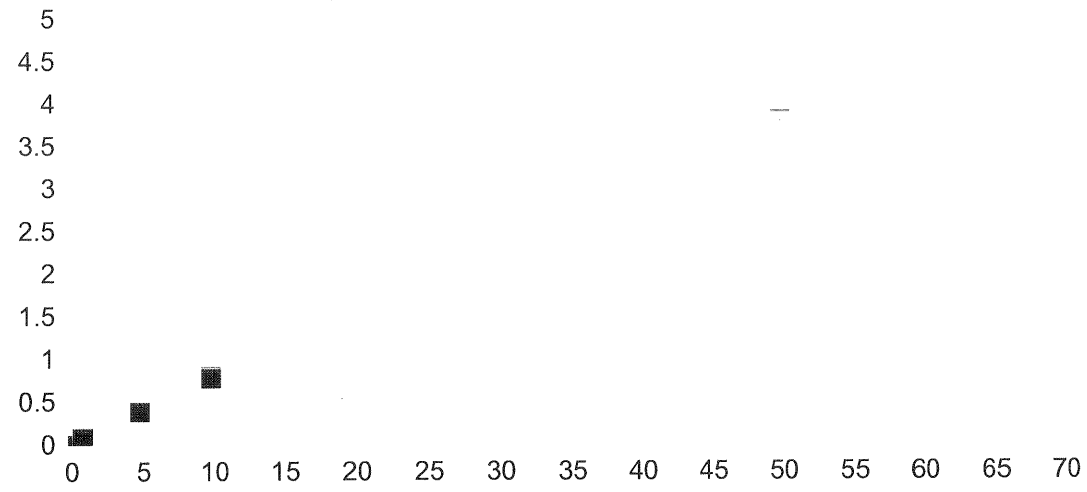
Se 196.090 {171}

Date of Fit: 12/15/2010 09:22:38 Type of Fit: Linear Weighting: 1/Conc

A0 (Offset):	0.001803	Re-Slope:	1.000000
A1 (Gain):	0.091505	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999896	Status:	OK.
Std Error of Est:	0.028943		
MDL:	0.086830		
MQL:	0.289434		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00001	.000	.000	.00180	.000	1
SEQ-10K099	10.000	10.098	.098	.979	.92575	.009	1
SEQ-10L009	.10000	.09837	-.002	-1.63	.01080	.000	1
SEQ-10L009	1.0000	.99126	-.009	-.874	.09250	.000	1
SEQ-10L021	.03000	.02471	-.005	-17.6	.00406	.000	1

SEQ-10L009	5.0000	4.9177	-.082	-1.65	.45177	.001	1

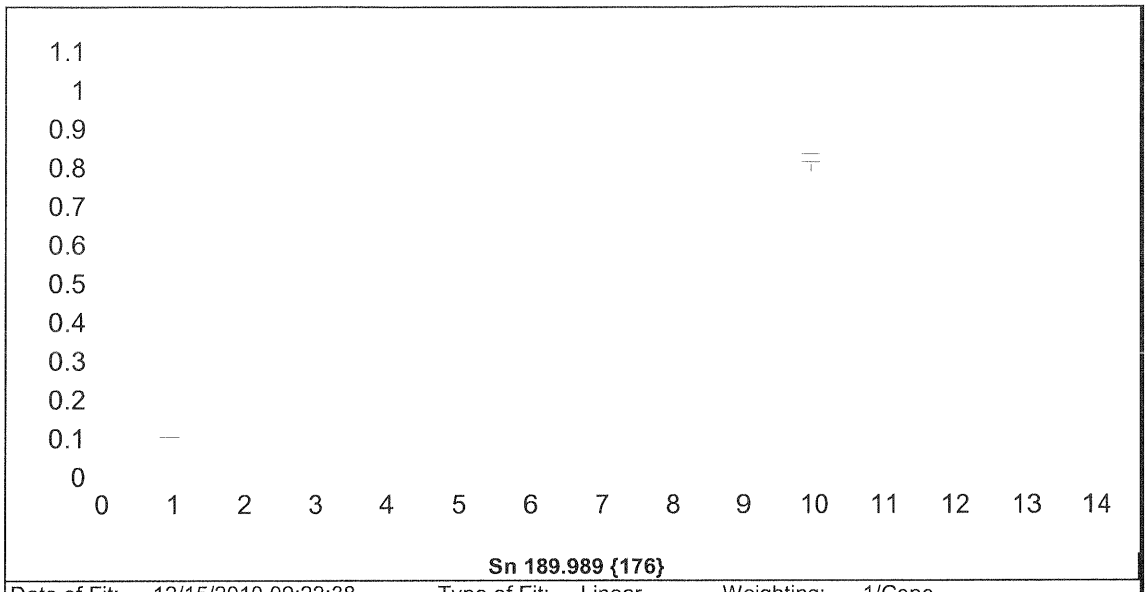


Si 251.612 {133}

Date of Fit:	12/15/2010 09:29:44	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000432	Re-Slope:	1.000000
A1 (Gain):	0.075876	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999974	Status:	OK.
Std Error of Est:	0.029646		
MDL:	0.088939		
MQL:	0.296464		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	-.00001	.000	.000	.00043	.000	1
SEQ-10K099	10.000	10.160	.160	1.60	.78695	.002	1
SEQ-10L009	1.0000	.98569	-.014	-1.43	.07678	.000	1
SEQ-10L021	1.0000	1.0160	.016	1.60	.07754	.000	1
SEQ-10L009	5.0000	4.9875	-.013	-.251	.38667	.001	1
SEQ-10L015	50.000	49.848	-.152	-.304	3.7827	.009	1

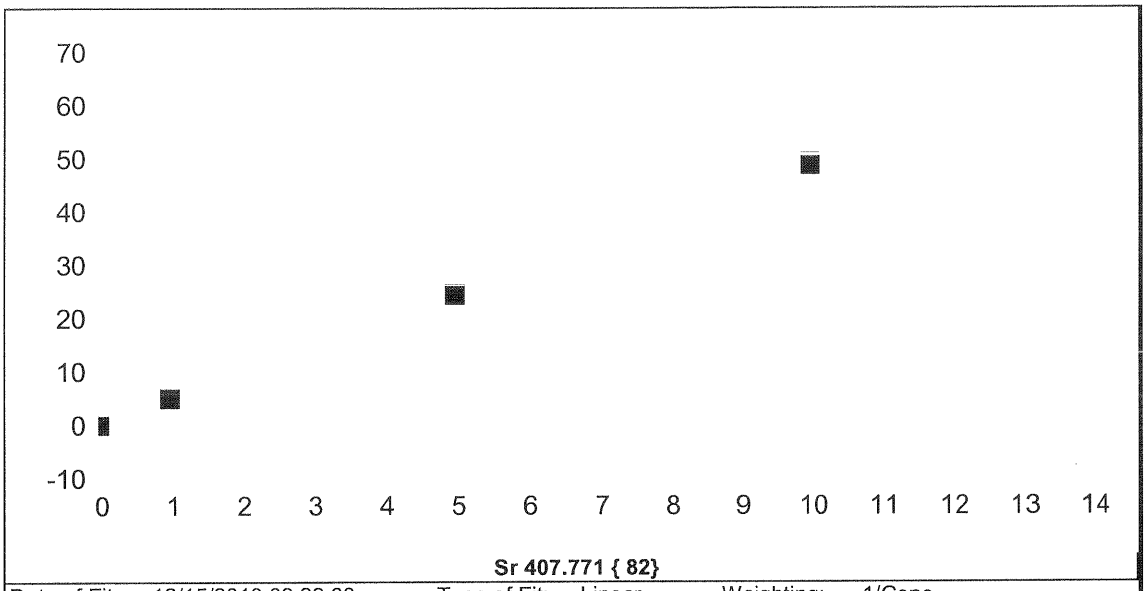


Sn 189.989 {176}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000533	Re-Slope:	1.000000
A1 (Gain):	0.079241	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999924	Status:	OK.
Std Error of Est:	0.024769		
MDL:	0.074307		
MQL:	0.247690		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00053	.000	1
SEQ-10K099	10.000	10.093	.093	.933	.80033	.010	1
SEQ-10L009	.10000	.10014	.000	.139	.00847	.000	1
SEQ-10L009	1.0000	.98916	-.011	-1.08	.07891	.000	1
SEQ-10L021	.01000	.01086	.001	8.60	.00139	.000	1
SEQ-10L009	5.0000	4.9166	-.083	-1.67	.39013	.000	1

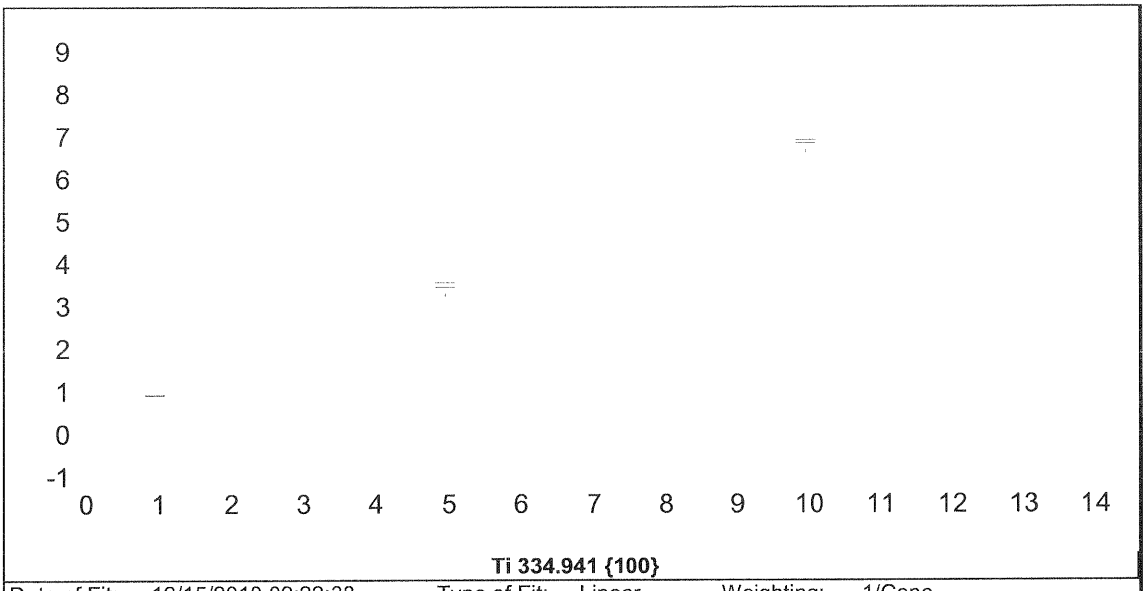


Sr 407.771 { 82}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.005757	Re-Slope:	1.000000
A1 (Gain):	4.888758	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999959	Status:	OK.
Std Error of Est:	0.018095		
MDL:	0.054285		
MQL:	0.180948		

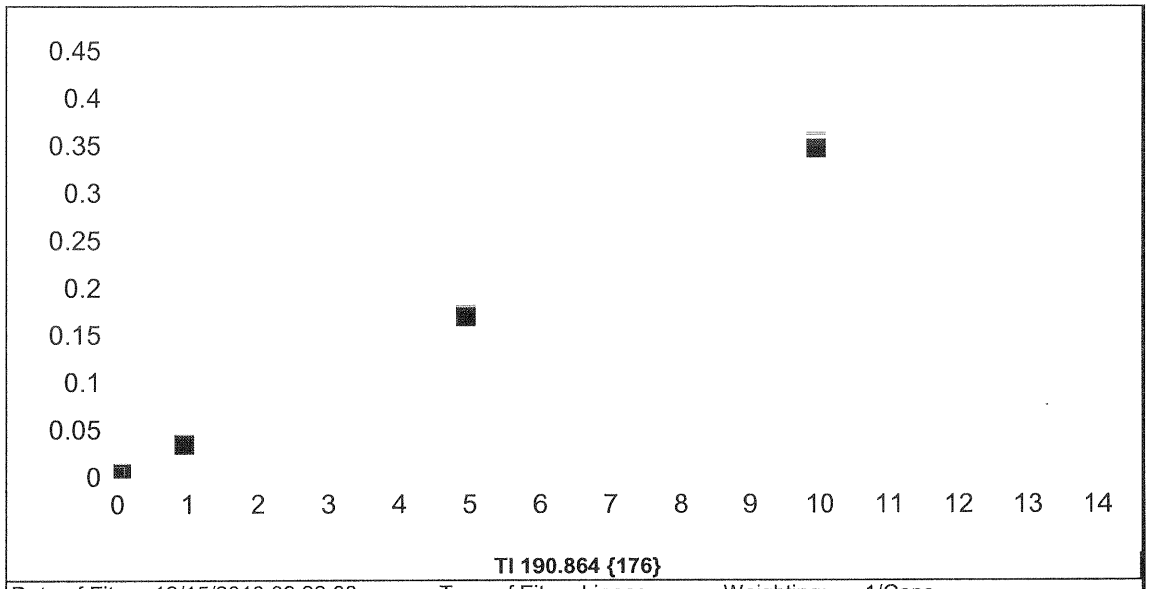
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	-.00576	.001	1
SEQ-10K099	10.000	9.9789	-.021	-.211	48.795	.553	1
SEQ-10L009	.10000	.10508	.005	5.08	.50797	.003	1
SEQ-10L009	1.0000	1.0309	.031	3.09	5.0358	.056	1
SEQ-10L021	.01000	.01021	.000	2.09	.04447	.001	1
SEQ-10L009	5.0000	4.9849	-.015	-.303	24.372	.252	1



Ti 334.941 {100}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc
A0 (Offset):	-0.001920		Re-Slope:	1.000000	
A1 (Gain):	0.664145		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999896		Status:	OK.	
Std Error of Est:	0.028997				
MDL:	0.086992				
MQL:	0.289972				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	-.00192	.000	1
SEQ-10K099	10.000	10.012	.012	.123	6.6477	.044	1
SEQ-10L009	.10000	.10694	.007	6.94	.06911	.001	1
SEQ-10L009	1.0000	1.0433	.043	4.33	.69098	.004	1
SEQ-10L021	.01000	.01132	.001	13.2	.00560	.000	1
SEQ-10L009	5.0000	4.9361	-.064	-1.28	3.2764	.052	1

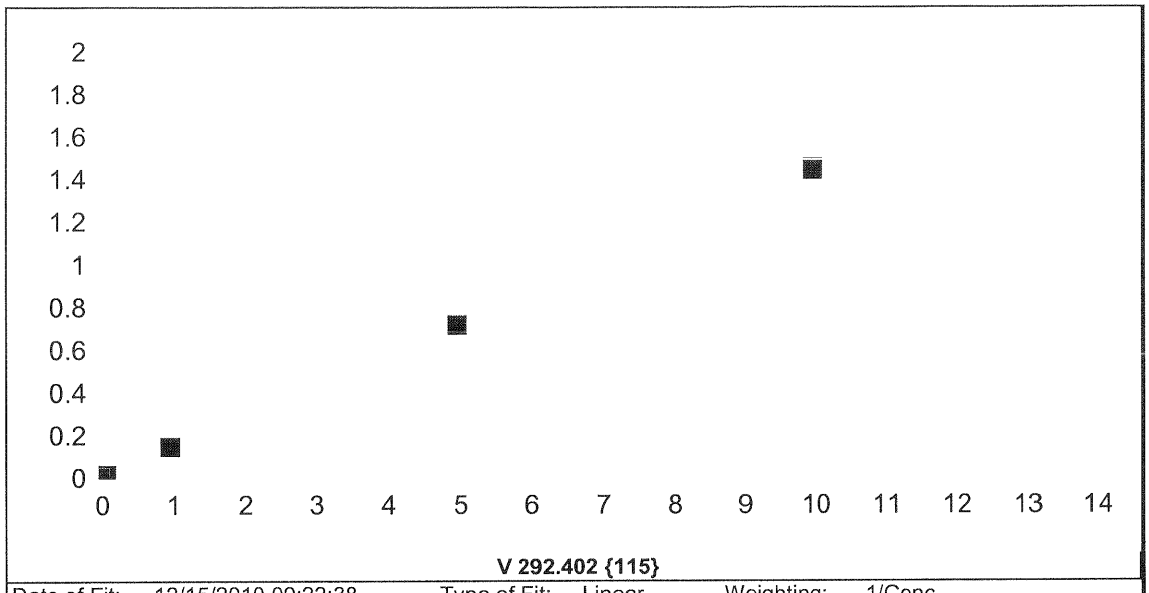


TI 190.864 {176}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000710	Re-Slope:	1.000000
A1 (Gain):	0.034341	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999917	Status:	OK.
Std Error of Est:	0.026036		
MDL:	0.078109		
MQL:	0.260363		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00071	.000	1
SEQ-10K099	10.000	10.095	.095	.951	.34978	.004	1
SEQ-10L009	.10000	.09858	-.001	-1.42	.00412	.000	1
SEQ-10L009	1.0000	.98125	-.019	-1.87	.03465	.000	1
SEQ-10L021	.01000	.01162	.002	16.2	.00111	.000	1
SEQ-10L009	5.0000	4.9235	-.077	-1.53	.17098	.000	1

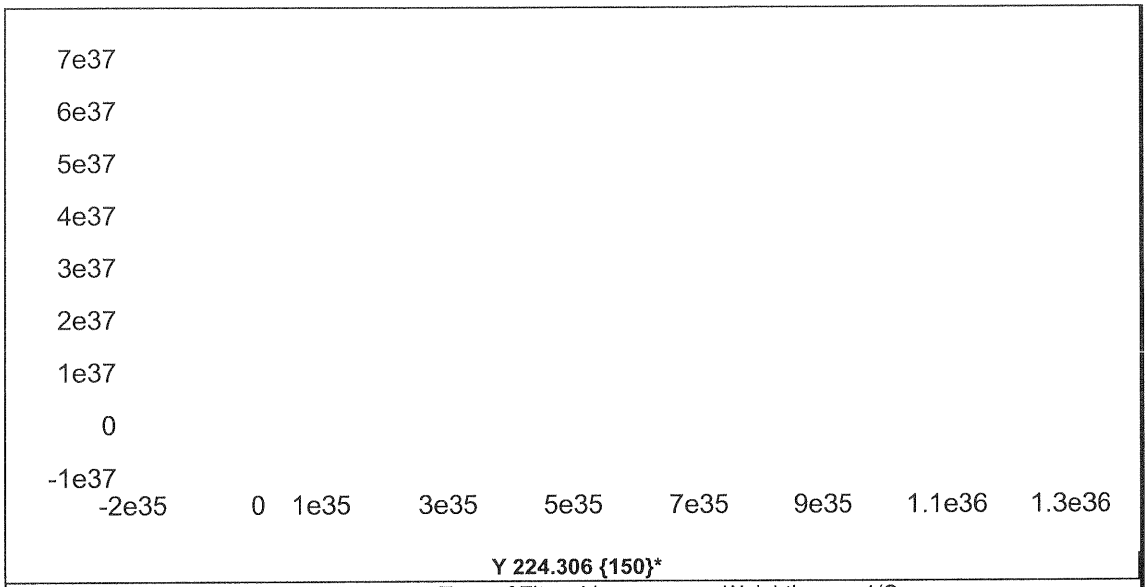


V 292.402 {115}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001203	Re-Slope:	1.000000
A1 (Gain):	0.144021	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999974	Status:	OK.
Std Error of Est:	0.014514		
MDL:	0.043542		
MQL:	0.145139		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00120	.000	1
SEQ-10K099	10.000	10.014	.014	.144	1.4447	.008	1
SEQ-10L009	.10000	.10332	.003	3.32	.01609	.000	1
SEQ-10L009	1.0000	1.0111	.011	1.11	.14693	.000	1
SEQ-10L021	.01000	.01200	.002	20.0	.00293	.000	1
SEQ-10L009	5.0000	4.9692	-.031	-.615	.71747	.000	1

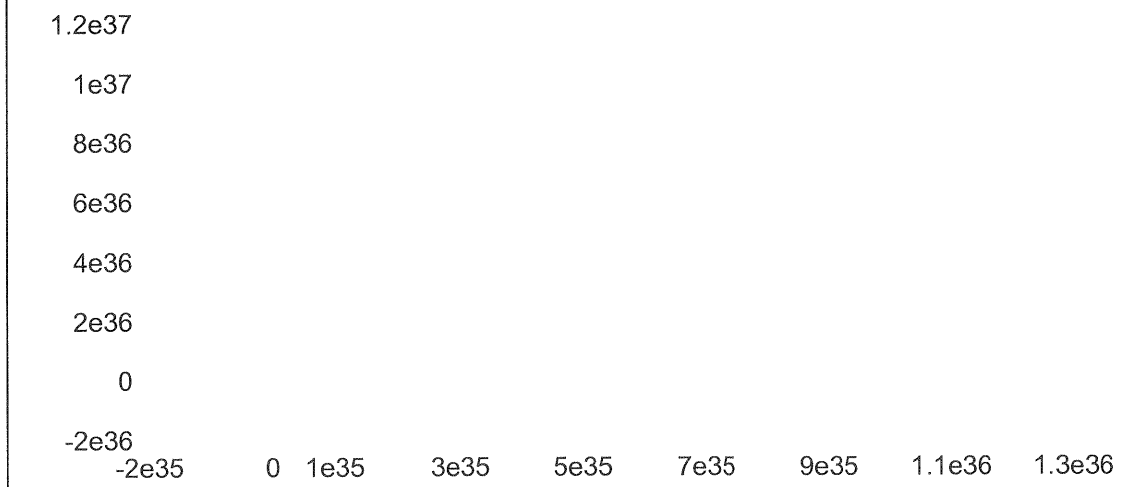


Y 224.306 {150}*

Date of Fit:	02/24/2009 11:10:01	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	55.445941	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	1.000000	Status:	OK.
Std Error of Est:	0.000000		
MDL:	0.000000		
MQL:	0.000000		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



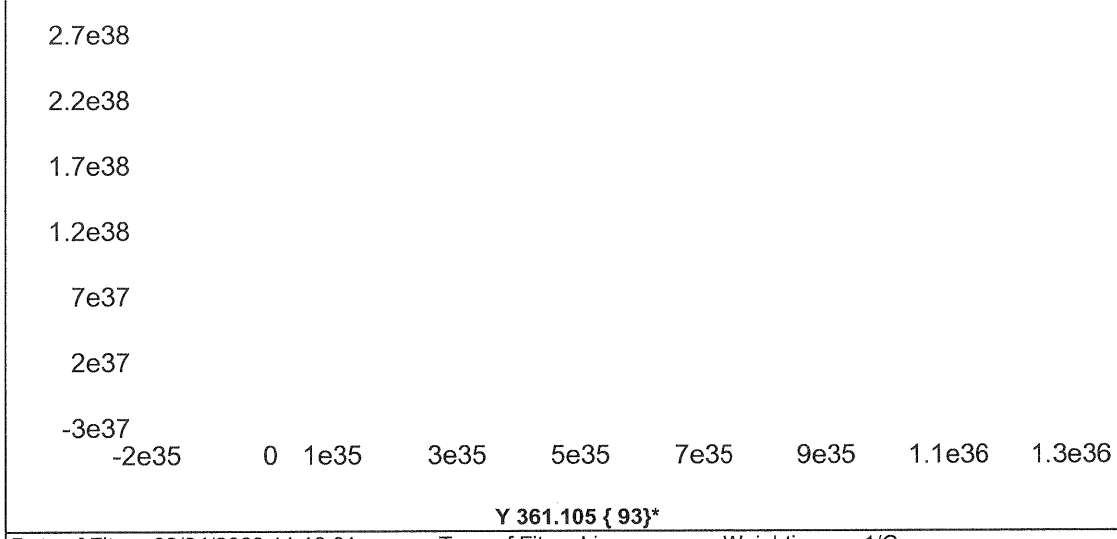
Y 360.073 { 93}*

Date of Fit:	02/24/2009 11:10:01	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	9.902756	Y-int:	0.000000

A2 (Curvature):	0.000000			
n (Exponent):	1.000000			
Correlation:	1.000000	Status:	OK.	
Std Error of Est:	0.000000			
MDL:	0.000000			
MQL:	0.000000			

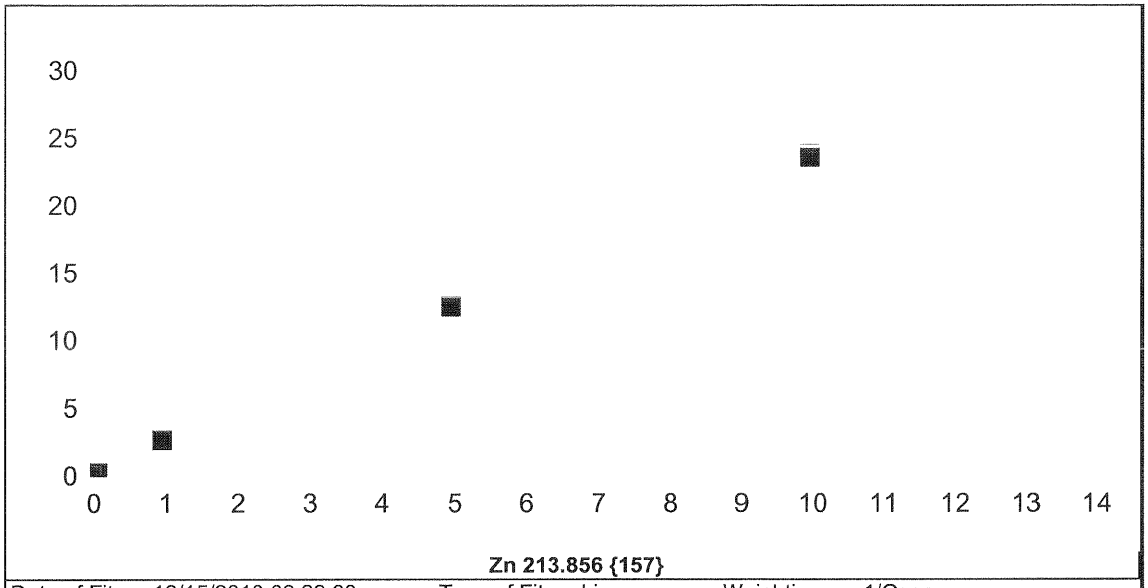
Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Date of Fit:	02/24/2009 11:10:01	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000000	Re-Slope:	1.000000
A1 (Gain):	241.861709	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	1.000000	Status:	OK.
Std Error of Est:	0.000000		
MDL:	0.000000		
MQL:	0.000000		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis



Zn 213.856 {157}

Date of Fit:	12/15/2010 09:22:38	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006393	Re-Slope:	1.000000
A1 (Gain):	2.419611	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999296	Status:	OK.
Std Error of Est:	0.075349		
MDL:	0.226047		
MQL:	0.753491		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
Blank	.00000	.00000	.000	.000	.00639	.001	1
SEQ-10L009	.10000	.11335	.013	13.3	.28066	.001	1
SEQ-10L009	1.0000	1.0951	.095	9.51	2.6563	.009	1
SEQ-10L021	.01000	.01088	.001	8.80	.03272	.000	1
SEQ-10L009	5.0000	5.1551	.155	3.10	12.481	.047	1
SEQ-10K099	10.000	9.7355	-.264	-2.64	23.564	.255	1

Sample Name: Blank Acquired: 12/15/2010 08:43:33 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0050**	**-.0048**	**.0021**	**-.0007**	**.0003**	**.0002**	**.0010**	**.0022**
Stddev	.0007	.0001	.0008	.0001	.0001	.0005	.0003	.0005
%RSD	13.78	3.056	38.83	6.889	33.65	348.6	32.67	21.38
#1	-.0054	-.0047	.0014	-.0007	.0004	.0003	.0011	.0024
#2	-.0042	-.0050	.0030	-.0007	.0002	.0006	.0012	.0025
#3	-.0054	-.0049	.0018	-.0008	.0003	-.0004	.0006	.0016

Elem	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707	Mg2795-L
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0005**	**-.0002**	**.0081**	**.0004**	**-.0009**	**.0071**	**.0048**	**.0002**
Stddev	.0001	.0003	.0003	.0002	.0002	.0016	.0017	.0002
%RSD	27.52	165.1	3.233	34.70	27.04	22.66	35.72	101.2
#1	-.0005	-.0004	.0079	.0005	-.0006	.0057	.0030	.0003
#2	-.0006	.0002	.0080	.0003	-.0011	.0068	.0051	.0000
#3	-.0004	-.0003	.0084	.0006	-.0009	.0088	.0064	.0002

Elem	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0000**	**.0007**	**.0021**	**.0122**	**-.0024**	**.0006**	**-.0010**	**.0002**
Stddev	.0006	.0003	.0001	.0015	.0002	.0001	.0001	.0003
%RSD	6372.	39.71	5.235	12.53	6.316	15.66	13.16	124.0
#1	-.0006	.0004	.0021	.0118	-.0026	.0007	-.0010	.0003
#2	.0006	.0008	.0023	.0140	-.0023	.0006	-.0011	.0004
#3	.0000	.0008	.0021	.0110	-.0023	.0005	-.0008	-.0001

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0015**	**.0018**	**.0004**	**.0005**	**-.0058**	**-.0019**	**.0007**	**.0012**
Stddev	.0001	.0002	.0003	.0001	.0009	.0005	.0000	.0003
%RSD	7.451	11.51	59.89	18.55	15.51	25.02	6.998	22.48
#1	.0015	.0020	.0005	.0005	-.0054	-.0020	.0008	.0010
#2	.0016	.0017	.0002	.0006	-.0051	-.0014	.0007	.0015
#3	.0013	.0017	.0007	.0004	-.0068	-.0024	.0007	.0011

ICV 200.7 >5%: Al(both) ↑, Cr↑, Ti, Zn
RE CRA H2O QC: S, Sb
RE soil CRA QC: passed all
CCV 200.7 >5%: K
CRL QC H2O failed: S

RE ICV Ca, Fe, (both) Na

CR 12-15-10
RE 9 Al, Ca, K, Fe, Na

Sample Name: Blank Acquired: 12/15/2010 08:43:33 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Zn2138
Units	Cts/S
Avg	**.0064**
Stddev	.0006
%RSD	9.074
#1	.0070
#2	.0062
#3	.0059

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	182.73	56.504	319.76
Stddev	1.39	2.101	7.90
%RSD	.76193	3.7189	2.4714
#1	182.28	58.780	327.11
#2	181.63	56.097	311.40
#3	184.30	54.637	320.77

Sample Name: SEQ-10L0214@CRL Acquired: 12/15/2010 08:50:03 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	As1890	B_2088	Ba4554	Be3130	Ca3179	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0020**	**-.0028**	**-.0001**	**.0044**	**.0149**	**.0216**	**.0152**	**.0045**
Stddev	.0003	.0005	.0001	.0000	.0008	.0014	.0005	.0002
%RSD	12.84	16.69	191.8	1.081	5.306	6.493	3.490	3.503
#1	-.0021	-.0023	-.0002	.0044	.0158	.0202	.0157	.0044
#2	-.0017	-.0032	-.0001	.0043	.0146	.0230	.0151	.0047
#3	-.0022	-.0028	.0001	.0044	.0144	.0217	.0147	.0045

Elem	Co2286	Cr2677	Cu3247	Fe2599-L	K_7664	Li6707	Mg2795-L	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0054**	**.0022**	**.0117**	**.0079**	**.0224**	**.0415**	**.0583**	**.0056**
Stddev	.0000	.0001	.0002	.0003	.0011	.0015	.0008	.0002
%RSD	.5521	4.327	1.593	3.489	4.904	3.537	1.441	3.160
#1	.0054	.0022	.0115	.0081	.0211	.0423	.0593	.0055
#2	.0054	.0022	.0119	.0076	.0231	.0425	.0580	.0056
#3	.0055	.0021	.0117	.0080	.0229	.0398	.0577	.0058

Elem	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820	Sb2068	Se1960
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0053**	**.0564**	**.0012**	**.0049**	**.0007**	**.0091**	**.0020**	**.0041**
Stddev	.0002	.0028	.0001	.0001	.0002	.0001	.0001	.0002
%RSD	3.265	4.996	7.324	1.232	25.07	1.439	5.841	4.277
#1	.0051	.0533	.0012	.0049	.0006	.0090	.0021	.0039
#2	.0053	.0586	.0011	.0049	.0009	.0093	.0019	.0041
#3	.0054	.0574	.0012	.0048	.0006	.0091	.0021	.0042

Elem	Si2516	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0775**	**.0014**	**.0445**	**.0056**	**.0011**	**.0029**	**.0327**
Stddev	.0003	.0001	.0008	.0004	.0002	.0000	.0001
%RSD	.3763	6.069	1.833	6.369	16.68	.8311	.4577
#1	.0776	.0014	.0443	.0058	.0013	.0030	.0326
#2	.0778	.0015	.0454	.0052	.0009	.0029	.0326
#3	.0772	.0013	.0438	.0058	.0011	.0029	.0329

Sample Name: SEQ-10L0214@CRL Acquired: 12/15/2010 08:50:03 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	188.16	55.174	333.17
Stddev	1.19	.805	10.41
%RSD	.63440	1.4583	3.1238
#1	189.51	55.267	344.09
#2	187.26	54.326	323.37
#3	187.70	55.927	332.06

Sample Name: SEQ-10L0099@4 Acquired: 12/15/2010 08:56:33 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	As1890	Ba4554	Be3130	Cd2144	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0237**	**.0002**	**.0086**	**.1420**	**.5494**	**.1052**	**.0602**	**.0227**
Stddev	.0002	.0004	.0001	.0007	.0044	.0004	.0001	.0002
%RSD	.8118	265.6	1.137	.5262	.8043	.3348	.2266	.9431
#1	.0236	.0007	.0085	.1425	.5443	.1048	.0601	.0226
#2	.0239	.0001	.0085	.1411	.5521	.1051	.0603	.0226
#3	.0236	-.0002	.0087	.1423	.5518	.1055	.0602	.0230

Elem	Cu3247	Fe2599-L	Li6707	Mg2795-L	Mn2576	Mo2020	Ni2316	P_1782
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0475**	**.0242**	**.0762**	**.2835**	**.1302**	**.0398**	**.0300**	**.0094**
Stddev	.0005	.0001	.0005	.0023	.0005	.0004	.0001	.0001
%RSD	1.011	.5665	.6643	.8175	.3880	.9107	.2486	.6273
#1	.0470	.0243	.0767	.2809	.1298	.0394	.0299	.0093
#2	.0479	.0244	.0757	.2846	.1301	.0400	.0301	.0094
#3	.0477	.0241	.0763	.2851	.1308	.0400	.0300	.0094

Elem	Pb2203	Sb2068	Se1960	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0075**	**.0096**	**.0108**	**.0085**	**.5080**	**.0691**	**.0041**	**.0161**
Stddev	.0003	.0003	.0002	.0001	.0031	.0006	.0002	.0002
%RSD	4.338	3.122	1.591	1.549	.6131	.8445	4.681	1.347
#1	.0072	.0096	.0108	.0084	.5046	.0685	.0042	.0161
#2	.0079	.0099	.0110	.0086	.5087	.0696	.0043	.0163
#3	.0075	.0094	.0106	.0084	.5107	.0693	.0039	.0159

Elem	Zn2138
Units	Cts/S
Avg	**.2807**
Stddev	.0014
%RSD	.4992
#1	.2793
#2	.2807
#3	.2821

Sample Name: SEQ-10L0099@4 Acquired: 12/15/2010 08:56:33 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	186.02	54.340	323.21
Stddev	.47	.859	6.97
%RSD	.25247	1.5815	2.1578
#1	186.35	53.412	331.03
#2	185.49	54.500	317.64
#3	186.23	55.108	320.95

Sample Name: SEQ-10L0098@5 Acquired: 12/15/2010 09:03:02 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2802**	**.0436**	**.0259**	**.0917**	**.0434**	**1.396**	**5.403**	**.0659**
Stddev	.0017	.0004	.0013	.0001	.0002	.005	.053	.0013
%RSD	.5901	1.014	5.204	.1357	.4590	.3864	.9896	2.008
#1	.2821	.0432	.0250	.0918	.0434	1.391	5.357	.0647
#2	.2795	.0435	.0275	.0916	.0435	1.396	5.390	.0657
#3	.2790	.0440	.0254	.0918	.0431	1.402	5.462	.0673

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.041**	**.6055**	**.2252**	**.4083**	**.2315**	**.0087**	**.0223**	**.7047**
Stddev	.002	.0010	.0011	.0006	.0019	.0003	.0017	.0065
%RSD	.1693	.1583	.4921	.1351	.8375	2.975	7.519	.9191
#1	1.043	.6064	.2252	.4087	.2332	.0089	.0206	.6986
#2	1.041	.6057	.2240	.4084	.2294	.0088	.0225	.7040
#3	1.040	.6045	.2263	.4077	.2319	.0084	.0239	.7115

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.752**	**.0820**	**1.264**	**.3760**	**.0997**	**.3196**	**.0872**	**.0831**
Stddev	.034	.0009	.007	.0013	.0022	.0006	.0004	.0005
%RSD	1.242	1.119	.5351	.3352	2.167	.2024	.4531	.5804
#1	2.723	.0813	1.267	.3767	.1006	.3197	.0875	.0835
#2	2.743	.0816	1.257	.3768	.0973	.3189	.0873	.0834
#3	2.790	.0830	1.269	.3746	.1013	.3202	.0868	.0826

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0851**	**.0809**	**.0925**	**.0768**	**.0789**	**5.036**	**.6910**	**.0346**
Stddev	.0001	.0003	.0004	.0004	.0001	.056	.0042	.0001
%RSD	.1543	.3510	.4586	.5492	.1419	1.102	.6023	.3215
#1	.0852	.0806	.0927	.0773	.0789	4.988	.6957	.0346
#2	.0850	.0809	.0928	.0767	.0788	5.022	.6896	.0348
#3	.0850	.0811	.0920	.0764	.0790	5.097	.6877	.0346

Sample Name: SEQ-10L0098@5 Acquired: 12/15/2010 09:03:02 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	Cts/S	Cts/S
Avg	**.1469**	**2.656**
Stddev	.0002	.009
%RSD	.1131	.3466
#1	.1468	2.664
#2	.1471	2.659
#3	.1469	2.646

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**185.93**	**56.209**	**333.46**
Stddev	.75	.480	8.65
%RSD	.40437	.85321	2.5952
#1	186.80	56.645	343.37
#2	185.52	56.286	329.60
#3	185.47	55.696	327.40

Sample Name: SEQ-10L0097@5.5 Acquired: 12/15/2010 09:09:29 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.381**	**.2395**	**.1172**	**.4540**	**.2148**	**6.793**	**26.55**	**.3101**
Stddev	.015	.0010	.0017	.0010	.0009	.017	.14	.0028
%RSD	1.108	.4043	1.439	.2230	.4187	.2569	.5084	.9029
#1	1.395	.2406	.1160	.4529	.2138	6.779	26.40	.3072
#2	1.383	.2388	.1165	.4548	.2150	6.787	26.59	.3104
#3	1.364	.2390	.1191	.4544	.2156	6.812	26.66	.3128

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.087**	**3.045**	**1.097**	**1.935**	**1.130**	**.0462**	**.0834**	**3.514**
Stddev	.004	.004	.002	.011	.004	.0001	.0008	.011
%RSD	.0749	.1393	.1371	.5444	.3740	.1566	.9314	.3128
#1	5.090	3.041	1.097	1.943	1.135	.0463	.0825	3.505
#2	5.089	3.049	1.099	1.939	1.129	.0462	.0838	3.511
#3	5.083	3.044	1.096	1.923	1.126	.0461	.0838	3.527

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**13.28**	**.3920**	**5.944**	**1.844**	**.4500**	**1.585**	**.4288**	**.4155**
Stddev	.11	.0006	.136	.003	.0012	.002	.0011	.0005
%RSD	.7914	.1465	2.285	.1852	.2705	.0958	.2598	.1271
#1	13.18	.3913	6.092	1.842	.4488	1.584	.4286	.4151
#2	13.25	.3924	5.825	1.848	.4512	1.585	.4300	.4161
#3	13.39	.3921	5.915	1.842	.4499	1.587	.4277	.4153

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4219**	**.3946**	**.4518**	**.3867**	**.3901**	**24.37**	**3.276**	**.1710**
Stddev	.0008	.0018	.0009	.0014	.0003	.25	.052	.0005
%RSD	.1854	.4586	.2031	.3589	.0840	1.034	1.598	.2775
#1	.4210	.3925	.4517	.3874	.3900	24.19	3.330	.1705
#2	.4225	.3955	.4527	.3875	.3899	24.26	3.274	.1710
#3	.4222	.3957	.4509	.3851	.3905	24.66	3.225	.1715

Sample Name: SEQ-10L0097@5.5 Acquired: 12/15/2010 09:09:29 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	Cts/S	Cts/S
Avg	**.7175**	**12.48**
Stddev	.0003	.05
%RSD	.0371	.3793
#1	.7174	12.46
#2	.7173	12.53
#3	.7178	12.45

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**186.23**	**55.587**	**329.82**
Stddev	1.30	.532	9.21
%RSD	.70047	.95764	2.7931
#1	187.68	56.057	340.44
#2	185.87	55.695	325.12
#3	185.15	55.009	323.91

Sample Name: SEQ-10K0991@6 Acquired: 12/15/2010 09:15:53 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.760**	**.4933**	**.2381**	**.9344**	**.4406**	**13.68**	**53.03**	**.6183**
Stddev	.028	.0029	.0032	.0074	.0025	.03	.46	.0064
%RSD	1.008	.5915	1.327	.7924	.5576	.2431	.8745	1.029
#1	2.787	.4966	.2346	.9428	.4434	13.64	52.67	.6149
#2	2.761	.4921	.2387	.9291	.4392	13.68	52.86	.6144
#3	2.731	.4912	.2409	.9312	.4392	13.71	53.55	.6257

Elem	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707	Mg2795-L
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6.252**	**2.188**	**3.835**	**2.243**	**.0928**	**.1658**	**7.117**	**26.40**
Stddev	.052	.012	.014	.004	.0005	.0011	.010	.28
%RSD	.8251	.5311	.3648	.1549	.4922	.6610	.1359	1.050
#1	6.307	2.178	3.850	2.239	.0923	.1665	7.109	26.24
#2	6.243	2.185	3.831	2.244	.0928	.1646	7.115	26.24
#3	6.205	2.201	3.823	2.246	.0932	.1664	7.128	26.72

Elem	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203	S_1820
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.7889**	**11.92**	**3.758**	**.9130**	**3.244**	**.8818**	**.8511**	**.8763**
Stddev	.0032	.13	.042	.0014	.029	.0093	.0112	.0023
%RSD	.4083	1.089	1.110	.1547	.8860	1.059	1.320	.2600
#1	.7895	11.77	3.804	.9137	3.277	.8909	.8638	.8787
#2	.7854	11.98	3.747	.9140	3.230	.8821	.8470	.8742
#3	.7917	12.01	3.723	.9114	3.225	.8723	.8425	.8760

Elem	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.8062**	**.9258**	**.7869**	**.8003**	**48.79**	**6.648**	**.3498**	**1.445**
Stddev	.0088	.0095	.0020	.0103	.55	.044	.0039	.008
%RSD	1.095	1.025	.2536	1.283	1.133	.6674	1.105	.5714
#1	.8162	.9364	.7856	.8121	48.46	6.639	.3542	1.436
#2	.7997	.9227	.7860	.7957	48.49	6.608	.3474	1.445
#3	.8025	.9182	.7892	.7932	49.43	6.696	.3477	1.453

Sample Name: SEQ-10K0991@6 Acquired: 12/15/2010 09:15:53 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Zn2138
Units	Cts/S
Avg	s **23.56**
Stddev	.26
%RSD	1.084
#1	s 23.83
#2	23.54
#3	23.32

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	186.17	56.412	347.76
Stddev	.30	1.377	5.97
%RSD	.16213	2.4415	1.7168
#1	186.16	57.334	352.72
#2	185.88	57.073	349.43
#3	186.48	54.829	341.14

Sample Name: SEQ-10L0152@7 Acquired: 12/15/2010 09:22:43 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Al3961-H	Ba4554	Ca3179	Cr2677	Cu3247	Fe2714-H	K_7664	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.087**	**64.55**	**3.048**	**10.36**	**19.33**	**.4334**	**.8319**	**34.05**
Stddev	.005	.20	.027	.08	.13	.0005	.0062	.04
%RSD	.4275	.3062	.8979	.8064	.6889	.1153	.7421	.1275
#1	1.083	64.55	3.020	10.45	19.43	.4340	.8259	34.07
#2	1.086	64.36	3.049	10.33	19.38	.4332	.8317	34.08
#3	1.092	64.75	3.074	10.29	19.18	.4330	.8382	34.00

Elem	Mg2852-H	Na5895	P_1782	Pb2203	Si2516
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.955**	**4.627**	**4.423**	**4.546**	**3.783**
Stddev	.012	.007	.009	.023	.009
%RSD	.3011	.1516	.1969	.5054	.2383
#1	3.945	4.619	4.414	4.566	3.793
#2	3.953	4.627	4.426	4.521	3.779
#3	3.968	4.633	4.431	4.552	3.776

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**178.14**	**55.818**	**340.41**
Stddev	2.08	1.318	.65
%RSD	1.1697	2.3611	.19196
#1	180.51	57.271	340.94
#2	177.30	55.482	339.68
#3	176.61	54.701	340.61

Sample Name: SEQ-10L0215@8 Acquired: 12/15/2010 09:29:49 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Al3961-H	Ca3179	Fe2714-H	K_7664	Mg2852-H	Na5895	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.287**	**6.144**	**.8707**	**1.646**	**7.852**	**9.179**	**8.517**
Stddev	.017	.048	.0037	.013	.019	.016	.032
%RSD	.7379	.7739	.4208	.7620	.2461	.1698	.3709
#1	2.273	6.098	.8745	1.632	7.836	9.163	8.554
#2	2.282	6.140	.8672	1.648	7.847	9.194	8.500
#3	2.305	6.193	.8705	1.657	7.873	9.179	8.498

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**187.40**	**55.708**	**344.89**
Stddev	.99	.959	3.99
%RSD	.52831	1.7208	1.1562
#1	188.55	56.701	345.58
#2	186.76	55.635	348.49
#3	186.91	54.788	340.61

Sample Name: SEQ-10L0216@9 Acquired: 12/15/2010 09:36:45 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Al3961-H	Ca3179	Fe2714-H	K_7664	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11.52**	**30.35**	**4.362**	**8.263**	**45.35**
Stddev	.08	.05	.050	.060	.24
%RSD	.7290	.1596	1.142	.7262	.5270
#1	11.56	30.32	4.332	8.272	45.45
#2	11.43	30.32	4.420	8.199	45.08
#3	11.58	30.41	4.336	8.318	45.53

Int. Std.	Y_3600	Y_3611
Units	Cts/S	Cts/S
Avg	**53.017**	**328.33**
Stddev	.052	5.72
%RSD	.09817	1.7422
#1	53.017	331.31
#2	52.965	321.73
#3	53.069	331.95

Sample Name: SEQ-10L0216@9 Acquired: 12/15/2010 09:44:34 Type: Cal
Method: V-GROOVE 14 Mode: IR Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Al3961-H	Ca3179	Fe2714-H	K_7664	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**11.23**	**29.64**	**4.420**	**8.143**	**45.25**
Stddev	.06	.16	.030	.047	.15
%RSD	.5429	.5400	.6793	.5799	.3287
#1	11.16	29.50	4.398	8.089	45.09
#2	11.24	29.61	4.455	8.161	45.36
#3	11.28	29.81	4.408	8.179	45.31

Int. Std.	Y_3600	Y_3611
Units	Cts/S	Cts/S
Avg	**54.561**	**327.31**
Stddev	.271	2.64
%RSD	.49605	.80623
#1	54.788	330.29
#2	54.633	325.26
#3	54.261	326.40

Inorganics
Method 6010B

Raw Quality Control Data

FORM IIa - INITIAL AND CONTINUING CALIBRATION CHECK

SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - Dewitt, NY
Project: Former Banknote Facility-Suffern, NY
Instrument ID: Iris 3
Calibration: UNASSIGNED
Sequence: S011625

Lab Sample ID	Analyte	True	Found	%R	QC Limits	Units	Method
S011625-ICV1	Chromium	2.00	2.16	108	90 - 110	mg/l	IR
S011625-CCV1	Chromium	5.00	5.25	105	90 - 110	mg/l	IR
S011625-CCV2	Chromium	5.00	5.18	104	90 - 110	mg/l	IR
S011625-CCV3	Chromium	5.00	5.26	105	90 - 110	mg/l	IR

* Values outside of QC limits

FORM II b - CRDL STANDARD

SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - Dewitt, NY
Project: Former Banknote Facility-Suffern, NY
Instrument ID: Iris 3
Calibration: UNASSIGNED
Sequence: S011625

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
S011625-CRL1	Chromium	0.0100	0.0119	119	mg/l	70 - 130
S011625-CRL2	Chromium	0.0100	0.0139	139 *	mg/l	70 - 130
S011625-CRL3	Chromium	0.0100	0.0122	122	mg/l	70 - 130

* Values outside of QC limits

FORM III - BLANKS
SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - Dewitt
Project: Former Banknote Facility-Suffern, NY
Instrument ID: Iris 3
Calibration: UNASSIGNED
Sequence: S011625

Lab Sample ID	Analyte	Found	MRL	Units	C	Method
S011625-ICB1	Chromium	BRL	0.0100	mg/l	U	SW846 6010C
S011625-CCB1	Chromium	BRL	0.0100	mg/l	U	SW846 6010C
1025694-BLK1	Chromium	BRL	0.0050	mg/l	U	SW846 6010C
S011625-CCB2	Chromium	BRL	0.0100	mg/l	U	SW846 6010C
S011625-CCB3	Chromium	BRL	0.0100	mg/l	U	SW846 6010C

FORM IV - ICP INTERFERENCE CHECK SAMPLE

SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - D
Project: Former Banknote Facility-Suffern, NY
Instrument ID: Iris 3
Calibration: UNASSIGNED
Sequence: S011625

Lab Sample ID	Analyte	True	Found	%R
S011625-IFA1	Iron	50.0	50.41000	101
	Magnesium	125	123.40000	99
	Aluminum	125	124.90000	100
	Calcium	125	124.60000	100
	Chromium		-0.00210	
S011625-IFB1	Iron	25.0	24.56000	98
	Magnesium	62.5	60.58000	97
	Aluminum	62.5	60.02000	96
	Calcium	62.5	60.73000	97
	Chromium	0.250	0.25390	102
S011625-IFA2	Iron	50.0	50.82000	102
	Magnesium	125	123.30000	99
	Aluminum	125	123.40000	99
	Calcium	125	123.20000	99
	Chromium		-0.00100	
S011625-IFB2	Iron	25.0	24.80000	99
	Magnesium	62.5	60.75000	97
	Aluminum	62.5	59.39000	95
	Calcium	62.5	60.34000	97
	Chromium	0.250	0.25630	103

* Values outside of QC limits (Acceptance Limits: +/- 20%)

FORM IIIa - LCS / LCS DUPLICATE RECOVERY

SW846 6010C

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA	SDG:	21844
Client:	Environmental Resources Management - Dewitt, N	Project:	Former Banknote Facility-Suffern, NY
Matrix:	Aqueous	Instrument:	Iris 3
Batch:	1025694	Laboratory ID:	1025694-BS1
Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Analyzed:	12/15/10 12:06		
		Spike ID:	10K0900

COMPOUND	SPIKE ADDED (mg/l)	LCS CONCENTRATION (mg/l)	LCS % REC. #	QC LIMITS REC.
Chromium	1.25	1.33	107	85 - 115

COMPOUND	SPIKE ADDED (mg/l)	LCSD CONCENTRATION (mg/l)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Chromium	1.25	1.32	106	0.8	20	85 - 115

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Individual peaks for multi-component analytes are indicated by a number in parentheses

FORM VIII - SERIAL DILUTION

SW846 6010C

Dup (12/10)

Laboratory: Spectrum Analytical, Inc. - Agawam, MA
SDG: 21844
Client: Environmental Resources Management - Dewitt, NY
Project: Former Banknote Facility-Suffern, NY
Laboratory ID: S011625-SRD1
Sequence: S011625
Lab Source ID: SB21844-01
Preparation: 1025694
Initial/Final: 50 / 25
Source Sample Name: Dup (12/10)
% Solids:

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method	QC Limits % Difference
Chromium	1.49		1.57		5		SW846 6010C	10

* Values outside of QC limits

Organic/FORM IX(Inorganic) - METHOD DETECTION AND REPORTING LIMITS

SW846 6010C

Laboratory: Spectrum Analytical, Inc. - Agawam, MA **SDG:** 21844

Client: Environmental Resources Management - Dewitt, NY **Project:** Former Banknote Facility-Suffern, NY

Analyte	MDL	MRL	Units
Iron	0.0047	0.0100	mg/l
Magnesium	0.0049	0.0250	mg/l
Aluminum	0.0056	0.0075	mg/l
Calcium	0.0435	0.100	mg/l
Chromium	0.0067	0.0100	mg/l

Sample Name: SEQ-ICV@-10L0275 Acquired: 12/15/2010 10:04:02 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.029**	**2.165**	**2.153**	**1.875**	**1.955**	**2.091**	**1.905**	F **2.214**
Stddev	.018	.041	.036	.008	.011	.014	.020	.032
%RSD	1.762	1.873	1.687	.4372	.5463	.6459	1.021	1.422
#1	1.047	2.189	2.162	1.872	1.942	2.088	1.893	2.225
#2	1.030	2.189	2.184	1.869	1.962	2.079	1.895	2.239
#3	1.011	2.119	2.113	1.885	1.959	2.105	1.928	2.179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value								2.000
Range								10.00%

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.073**	**2.001**	**2.156**	**2.077**	F **2.236**	F **2.377**	**18.59**	**2.012**
Stddev	.013	.004	.006	.028	.048	.068	.09	.012
%RSD	.6327	.1763	.2890	1.358	2.145	2.846	.4733	.5734
#1	2.088	2.005	2.157	2.103	2.280	2.433	18.52	2.006
#2	2.069	2.001	2.150	2.082	2.241	2.395	18.69	2.005
#3	2.063	1.997	2.162	2.047	2.185	2.302	18.57	2.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass
Value					2.000	2.000		
Range					10.00%	10.00%		

Sample Name: SEQ-ICV@-10L0275 Acquired: 12/15/2010 10:04:02 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.990**	**2.044**	**2.059**	**2.066**	F **2.374**	**1.944**	**2.037**	**2.005**
Stddev	.019	.009	.014	.014	.078	.016	.017	.015
%RSD	.9425	.4293	.6680	.6878	3.287	.8041	.8231	.7703
#1	1.980	2.054	2.048	2.081	2.433	1.929	2.051	2.019
#2	1.979	2.039	2.055	2.064	2.405	1.944	2.041	2.006
#3	2.012	2.039	2.075	2.053	2.286	1.960	2.019	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value					2.000			
Range					10.00%			

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.952**	**1.946**	**2.044**	**10.25**	**1.973**	**1.909**	**2.113**	**1.959**
Stddev	.015	.010	.016	.04	.008	.024	.032	.003
%RSD	.7902	.5165	.7704	.3890	.3933	1.261	1.490	.1725
#1	1.936	1.937	2.055	10.29	1.969	1.891	2.147	1.958
#2	1.952	1.946	2.051	10.25	1.967	1.899	2.107	1.957
#3	1.967	1.957	2.026	10.21	1.982	1.936	2.085	1.963
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-ICV@-10L0275 Acquired: 12/15/2010 10:04:02 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**1.999**	**2.184**
Stddev	.009	.028
%RSD	.4504	1.261
#1	2.000	2.213
#2	1.990	2.179
#3	2.008	2.159
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**188.82**	**56.245**	**329.95**
Stddev	.59	.278	10.14
%RSD	.31000	.49398	3.0733
#1	189.40	56.140	341.50
#2	188.84	56.561	325.84
#3	188.23	56.036	322.52

Sample Name: SEQ-ICB Acquired: 12/15/2010 10:11:38 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0042**	**-.0379**	**-.0008**	**.0050**	**-.0004**	**-.0001**	**.0078**
Stddev	.0013	.0149	.1087	.0013	.0010	.0005	.0001	.0082
%RSD	641.1	356.4	286.8	172.2	19.22	116.1	67.26	105.6
#1	.0003	-.0104	-.1284	.0007	.0049	-.0010	-.0001	.0058
#2	-.0017	.0036	.0827	-.0011	.0060	-.0004	.0000	.0168
#3	.0008	.0194	-.0680	-.0018	.0040	.0001	-.0001	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**-.0001**	**.0000**	**.0025**	**.0036**	**.0254**	**.1014**	**.0019**
Stddev	.0001	.0001	.002	.0008	.0010	.0152	.0482	.0034
%RSD	27.63	90.54	50700.	29.72	27.96	59.98	47.53	176.7
#1	-.0007	-.0001	.0017	.0033	.0041	.0172	.0839	.0033
#2	-.0005	.0000	-.0013	.0025	.0042	.0429	.0644	-.0020
#3	-.0004	-.0001	-.0004	.0018	.0024	.0160	.1559	.0045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-ICB Acquired: 12/15/2010 10:11:38 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0034**	**.0000**	**.0007**	**.1843**	**.0004**	**.0000**	**.0017**
Stddev	.0004	.0062	.000	.0005	.0125	.0004	.0016	.0010
%RSD	95.16	181.1	225.7	64.38	6.766	91.52	12900.	59.45
#1	.0004	-.0002	.0000	.0011	.1960	.0000	-.0011	.0006
#2	.0009	.0105	-.0001	.0009	.1859	.0007	-.0007	.0026
#3	.0000	-.0002	.0000	.0002	.1712	.0005	.0018	.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0051**	**.0015**	**-.0023**	**-.0019**	**.0004**	**.0000**	**.0000**	**-.0075**
Stddev	.0012	.0015	.0017	.0038	.0017	.000	.0005	.0048
%RSD	23.57	102.7	73.48	199.7	443.2	7747.	6577.	63.66
#1	-.0065	.0023	-.0018	.0019	.0008	-.0002	.0006	-.0073
#2	-.0041	-.0003	-.0009	-.0018	-.0015	.0000	-.0004	-.0124
#3	-.0048	.0023	-.0041	-.0057	.0018	.0002	-.0001	-.0029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-ICB Acquired: 12/15/2010 10:11:38 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0003**	**.0003**
Stddev	.0006	.0002
%RSD	197.3	59.23
#1	-.0004	.0004
#2	.0005	.0001
#3	.0008	.0003
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**193.62**	**60.661**	**342.81**
Stddev	3.02	1.213	4.53
%RSD	1.5598	1.9989	1.3203
#1	192.99	61.573	347.62
#2	196.91	59.285	338.63
#3	190.97	61.124	342.20

Sample Name: SEQ-CRL@-10L0214 Acquired: 12/15/2010 10:40:34 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0097**	**.0485**	**-.0057**	**.0087**	**.0995**	**.0101**	**.0038**	**.1982**
Stddev	.0009	.0042	.0576	.0009	.0053	.0004	.0001	.0099
%RSD	8.792	8.676	1009.	10.48	5.352	3.585	1.491	4.980
#1	.0104	.0529	.0055	.0087	.1048	.0100	.0038	.2002
#2	.0099	.0479	.0454	.0078	.0994	.0106	.0038	.1875
#3	.0088	.0446	-.0681	.0097	.0942	.0099	.0039	.2069
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0045**	**.0095**	**.0119**	**.0117**	**.0333**	**.0367**	**.9948**	**.0513**
Stddev	.0003	.0004	.0007	.0016	.0012	.0147	.1149	.0034
%RSD	6.334	3.994	6.259	13.62	3.728	40.09	11.55	6.556
#1	.0046	.0099	.0111	.0118	.0334	.0286	.9389	.0488
#2	.0042	.0091	.0126	.0101	.0320	.0537	.9185	.0500
#3	.0048	.0095	.0119	.0133	.0344	.0278	1.127	.0551
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CRL@-10L0214 Acquired: 12/15/2010 10:40:34 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0204**	**.0174**	**.0041**	**.0093**	**.5396**	**.0113**	**.0523**	**.0167**
Stddev	.0004	.0064	.0003	.0004	.0145	.0006	.0025	.0006
%RSD	2.032	36.84	7.243	4.386	2.685	5.491	4.772	3.478
#1	.0200	.0138	.0039	.0094	.5563	.0112	.0552	.0165
#2	.0204	.0249	.0045	.0096	.5320	.0119	.0512	.0162
#3	.0208	.0137	.0040	.0088	.5304	.0107	.0506	.0173
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0969**	F **.0056**	**.0246**	**1.024**	**.0101**	**.0097**	**.0110**	**.0093**
Stddev	.0014	.0003	.0009	.014	.0019	.0003	.0003	.0030
%RSD	1.412	5.490	3.555	1.370	18.87	3.335	2.286	32.26
#1	.0966	.0053	.0256	1.039	.0080	.0095	.0113	.0060
#2	.0984	.0057	.0245	1.023	.0105	.0095	.0110	.0102
#3	.0957	.0059	.0238	1.011	.0118	.0101	.0108	.0118
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0100	.0120						
Range	30.00%	-30.00%						

Sample Name: SEQ-CRL@-10L0214 Acquired: 12/15/2010 10:40:34 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0123**	**.0118**
Stddev	.0018	.0002
%RSD	15.02	1.806
#1	.0124	.0120
#2	.0140	.0118
#3	.0103	.0116
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**195.73**	**60.317**	**344.22**
Stddev	3.49	1.059	7.84
%RSD	1.7809	1.7561	2.2775
#1	199.75	60.545	350.98
#2	193.66	59.163	335.63
#3	193.77	61.244	346.04

Sample Name: SEQ-IFA@-10L0035 Acquired: 12/15/2010 10:55:54 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	^ *****	**124.9**	**.0016**	**.0075**	**.0002**	**.0000**	**124.6**
Stddev	.0019	-----	1.7	.0016	.0027	.0004	.0002	1.5
%RSD	134.7	-----	1.358	102.4	35.23	173.4	1597.	1.198
#1	.0017	128.6	123.6	.0033	.0060	-.0001	.0002	123.5
#2	.0032	^ -----	124.2	.0002	.0106	.0006	.0001	124.1
#3	-.0006	^ -----	126.8	.0012	.0060	.0001	-.0002	126.3
Check ?	None	None	Chk Pass	None	None	None	None	Chk Pass
Value								
Range								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0009**	**-.0021**	**.0039**	^ *****	**50.41**	**.0745**	**.0046**
Stddev	.0001	.0002	.0011	.0007	-----	.29	.0246	.0012
%RSD	20.16	21.47	52.09	16.96	-----	.5712	33.01	26.78
#1	.0008	.0011	-.0013	.0031	48.31	50.52	.0876	.0035
#2	.0007	.0007	-.0033	.0042	^ -----	50.62	.0897	.0043
#3	.0005	.0009	-.0016	.0043	^ -----	50.08	.0461	.0060
Check ?	None	None	None	None	None	Chk Pass	None	None
Value								
Range								

Sample Name: SEQ-IFA@-10L0035 Acquired: 12/15/2010 10:55:54 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**83.67**	**123.4**	**-.0013**	**-.0015**	**.0789**	**-.0019**	**.0108**	**.0024**
Stddev	1.85	.4	.0001	.0009	.0440	.0007	.0023	.0035
%RSD	2.204	.3622	9.961	62.41	55.77	37.14	20.85	148.9
#1	82.45	123.4	-.0013	-.0024	.1258	-.0013	.0091	.0047
#2	82.77	122.9	-.0014	-.0017	.0726	-.0017	.0100	.0042
#3	85.80	123.8	-.0011	-.0005	.0385	-.0027	.0134	-.0017
Check ?	None	Chk Pass	None	None	None	None	None	None
Value								
Range								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0052**	**-.0015**	**.0061**	**.0117**	**-.0003**	**-.0359**	**-.0009**	**.0078**
Stddev	.0020	.0009	.0036	.0018	.0018	.0004	.0002	.0026
%RSD	39.79	61.82	59.97	14.98	650.0	1.233	21.36	33.71
#1	.0028	-.0009	.0032	.0134	-.0021	-.0357	-.0011	.0060
#2	.0066	-.0026	.0048	.0099	.0015	-.0357	-.0008	.0108
#3	.0060	-.0011	.0102	.0119	-.0003	-.0365	-.0008	.0066
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Sample Name: SEQ-IFA@-10L0035 Acquired: 12/15/2010 10:55:54 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0015**	**.0039**
Stddev	.0021	.0004
%RSD	139.7	9.448
#1	.0020	.0039
#2	.0033	.0035
#3	-.0008	.0043
Check ?	None	None
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**191.34**	**62.410**	**343.93**
Stddev	2.52	.890	11.30
%RSD	1.3160	1.4260	3.2852
#1	194.24	63.216	356.94
#2	190.10	62.558	338.29
#3	189.68	61.455	336.57

Sample Name: SEQ-IFB@-10L0036 Acquired: 12/15/2010 11:03:41 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5183**	**60.75**	**60.02**	**.0026**	**-.0028**	**.2560**	**.2400**	**60.73**
Stddev	.0055	.03	.84	.0010	.0020	.0028	.0035	.56
%RSD	1.059	.0561	1.395	39.95	71.06	1.077	1.459	.9154
#1	.5235	60.72	59.15	.0035	-.0005	.2528	.2364	60.50
#2	.5187	60.75	60.11	.0027	-.0041	.2575	.2401	60.32
#3	.5126	60.79	60.82	.0015	-.0040	.2576	.2434	61.36
Check ?	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4908**	**.2299**	**.2539**	**.2565**	**24.43**	**24.56**	**-.0017**	**.0016**
Stddev	.0012	.0009	.0048	.0006	.49	.48	.1601	.0045
%RSD	.2423	.3902	1.891	.2203	1.989	1.948	9349.	289.1
#1	.4920	.2303	.2592	.2559	24.99	25.11	.1512	-.0016
#2	.4897	.2289	.2498	.2565	24.18	24.34	-.1682	.0067
#3	.4906	.2306	.2527	.2570	24.11	24.23	.0119	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	None
Value								
Range								

Sample Name: SEQ-IFB@-10L0036 Acquired: 12/15/2010 11:03:41 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.72**	**60.58**	**.2505**	**-.0019**	**.0813**	**.4606**	**.0076**	**.4836**
Stddev	.76	.13	.0038	.0004	.0122	.0022	.0004	.0021
%RSD	1.555	.2134	1.526	19.12	15.06	.4835	5.664	.4273
#1	47.85	60.44	.2547	-.0016	.0674	.4586	.0075	.4858
#2	49.08	60.64	.2472	-.0023	.0858	.4601	.0081	.4832
#3	49.24	60.67	.2496	-.0019	.0906	.4630	.0072	.4818
Check ?	None	Chk Pass	Chk Pass	None	None	Chk Pass	None	Chk Pass
Value								
Range								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**-.0005**	**-.0012**	**-.0044**	**-.0017**	**-.0169**	**-.0002**	**.0070**
Stddev	.0011	.0036	.0006	.0019	.0003	.0003	.0002	.0020
%RSD	326.1	710.2	50.44	43.20	16.29	1.559	102.3	29.01
#1	.0007	-.0036	-.0006	-.0063	-.0014	-.0168	-.0003	.0083
#2	-.0002	.0035	-.0012	-.0044	-.0019	-.0167	-.0003	.0079
#3	-.0015	-.0013	-.0018	-.0025	-.0017	-.0172	.0000	.0046
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Sample Name: SEQ-IFB@-10L0036 Acquired: 12/15/2010 11:03:41 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.2480**	**.5473**
Stddev	.0025	.0015
%RSD	.9952	.2680
#1	.2505	.5487
#2	.2456	.5474
#3	.2480	.5458
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**200.07**	**63.449**	**346.70**
Stddev	1.49	.663	2.07
%RSD	.74322	1.0457	.59674
#1	201.78	62.803	344.38
#2	199.13	64.129	348.36
#3	199.28	63.416	347.34

Sample Name: SEQ-CCV@-10L0362 Acquired: 12/15/2010 11:11:26 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.019**	**10.19**	**10.02**	**5.001**	**5.021**	**5.279**	**4.875**	**10.05**
Stddev	.011	.07	.13	.009	.017	.026	.044	.05
%RSD	1.041	.6687	1.294	.1693	.3385	.4878	.8952	.4940
#1	1.028	10.21	9.866	4.997	5.011	5.249	4.827	9.991
#2	1.022	10.25	10.10	5.011	5.040	5.293	4.887	10.07
#3	1.008	10.11	10.09	4.995	5.010	5.295	4.912	10.08
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.961**	**4.916**	**5.247**	**5.081**	**10.30**	**10.52**	**9.207**	**4.943**
Stddev	.035	.019	.012	.034	.06	.08	.109	.030
%RSD	.7041	.3940	.2363	.6771	.6140	.7713	1.185	.5983
#1	4.989	4.931	5.261	5.104	10.37	10.59	9.089	4.910
#2	4.974	4.922	5.241	5.098	10.29	10.54	9.228	4.955
#3	4.922	4.894	5.238	5.041	10.24	10.43	9.304	4.965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV@-10L0362 Acquired: 12/15/2010 11:11:26 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.757**	**10.10**	**4.852**	**5.090**	**9.919**	**4.833**	**5.084**	**4.949**
Stddev	.042	.02	.144	.040	.021	.003	.046	.033
%RSD	.4310	.1847	2.970	.7831	.2155	.0681	.9128	.6681
#1	9.708	10.10	5.017	5.113	9.900	4.837	5.114	4.975
#2	9.785	10.12	4.753	5.113	9.916	4.831	5.108	4.960
#3	9.777	10.08	4.786	5.044	9.942	4.831	5.031	4.911
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.979**	**5.064**	**5.165**	**10.41**	**4.894**	**4.814**	s **5.060**	**4.961**
Stddev	.011	.014	.034	.06	.020	.063	.095	.020
%RSD	.2244	.2813	.6478	.5995	.4148	1.315	1.879	.3966
#1	4.966	5.050	5.181	10.46	4.910	4.758	5.168	4.963
#2	4.983	5.078	5.187	10.43	4.901	4.801	s 5.022	4.979
#3	4.988	5.066	5.126	10.34	4.871	4.883	s 4.990	4.940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV@-10L0362 Acquired: 12/15/2010 11:11:26 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**4.953**	**5.265**
Stddev	.001	.052
%RSD	.0213	.9843
#1	4.954	5.303
#2	4.953	5.285
#3	4.952	5.206
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**200.37**	**62.368**	**352.37**
Stddev	.57	.111	6.60
%RSD	.28641	.17816	1.8732
#1	200.20	62.409	359.98
#2	199.90	62.242	349.01
#3	201.01	62.452	348.13

Sample Name: SEQ-CCB Acquired: 12/15/2010 11:18:53 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0019**	**.0107**	**.0146**	**.0001**	**.0148**	**.0014**	**.0003**	**.0146**
Stddev	.0010	.0217	.0112	.0027	.0021	.0001	.0004	.0112
%RSD	50.20	202.8	76.23	2819.	14.00	6.704	142.8	76.95
#1	-.0013	.0356	.0275	.0004	.0142	.0013	.0008	.0244
#2	-.0014	.0006	.0088	.0026	.0171	.0015	.0000	.0023
#3	-.0030	-.0041	.0077	-.0027	.0131	.0014	.0001	.0172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0009**	**.0003**	**.0013**	**.0065**	**.0361**	**.0155**	**.0015**
Stddev	.0014	.0015	.0003	.0004	.0021	.0164	.0886	.0036
%RSD	150.4	172.1	104.7	33.13	33.11	45.49	571.8	236.3
#1	.0003	.0000	.0007	.0011	.0079	.0203	-.0853	.0054
#2	.0026	.0027	.0001	.0011	.0075	.0531	.0505	.0008
#3	.0000	.0000	.0002	.0019	.0040	.0350	.0813	-.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 12/15/2010 11:18:53 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0060**	**-.0015**	**.0007**	**.0029**	**.0052**	**.0005**	**.0039**	**.0007**
Stddev	.0051	.0073	.0001	.0022	.0123	.0021	.0029	.0016
%RSD	84.85	499.3	19.85	75.80	235.8	394.1	73.15	218.9
#1	.0117	.0067	.0009	.0024	-.0087	-.0008	.0019	.0018
#2	.0047	-.0038	.0006	.0052	.0147	.0030	.0072	-.0011
#3	.0017	-.0073	.0006	.0009	.0097	-.0006	.0027	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0023**	**.0045**	**.0015**	**-.0021**	**.0009**	**.0005**	**.0005**	**-.0087**
Stddev	.0025	.0019	.0018	.0014	.0027	.0004	.0009	.0031
%RSD	110.3	41.59	123.6	66.80	309.6	81.30	173.7	35.52
#1	-.0005	.0043	.0011	-.0009	-.0006	.0010	.0008	-.0076
#2	-.0011	.0028	.0034	-.0018	.0040	.0005	.0012	-.0063
#3	-.0052	.0066	-.0001	-.0037	-.0008	.0001	-.0005	-.0122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 12/15/2010 11:18:53 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**-.0017**	**.0028**
Stddev	.0016	.0019
%RSD	92.73	69.30
#1	-.0013	.0017
#2	-.0003	.0050
#3	-.0034	.0016
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**194.14**	**59.921**	**339.95**
Stddev	3.93	1.673	18.92
%RSD	2.0230	2.7925	5.5645
#1	198.67	61.816	361.57
#2	191.64	58.645	331.80
#3	192.12	59.303	326.47

Sample Name: 1025694-BLK1 Acquired: 12/15/2010 11:59:07 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0021**	**-.0002**	**-.0418**	**-.0040**	**-.0039**	**-.0005**	**-.0002**	**.0067**
Stddev	.0024	.0080	.0676	.0012	.0015	.0010	.0001	.0126
%RSD	114.9	4292.	161.7	30.50	37.07	206.5	53.60	187.0
#1	-.0049	-.0068	-.1194	-.0048	-.0025	-.0004	-.0001	.0162
#2	-.0010	-.0025	-.0094	-.0045	-.0054	.0005	-.0002	.0115
#3	-.0005	.0087	.0036	-.0026	-.0038	-.0015	-.0002	-.0075

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**-.0010**	**.0004**	**-.0007**	**.0000**	**.0408**	**-.0260**	**-.0020**
Stddev	.0003	.0003	.0005	.0021	.0008	.0394	.0791	.0017
%RSD	39.78	26.85	121.2	290.7	3674.	96.36	304.5	84.63
#1	-.0010	-.0013	.0000	-.0009	.0010	-.0043	.0513	-.0035
#2	-.0004	-.0008	.0002	-.0028	-.0005	.0677	-.0224	-.0002
#3	-.0009	-.0008	.0009	.0015	-.0004	.0592	-.1068	-.0023

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0014**	**-.0001**	**.0013**	**-.0258**	**-.0015**	**.0039**	**-.0009**
Stddev	.0001	.0059	.0001	.0005	.0115	.0012	.0025	.0007
%RSD	23.20	417.1	78.16	37.22	44.47	80.75	62.21	72.96
#1	.0004	-.0079	.0000	.0013	-.0373	-.0026	.0055	-.0009
#2	.0003	.0038	-.0001	.0008	-.0257	-.0015	.0052	-.0003
#3	.0002	-.0002	-.0001	.0018	-.0144	-.0003	.0011	-.0016

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0087**	**.0105**	**.0032**	**-.0042**	**.0013**	**.0001**	**-.0011**	**-.0061**
Stddev	.0036	.0024	.0011	.0045	.0028	.0003	.0011	.0020
%RSD	40.68	22.41	34.03	108.7	211.9	344.2	97.82	32.27
#1	-.0124	.0123	.0043	-.0036	.0042	.0004	-.0023	-.0082
#2	-.0086	.0114	.0021	.0000	-.0014	-.0003	-.0010	-.0043
#3	-.0053	.0078	.0032	-.0090	.0011	.0002	-.0001	-.0058

Sample Name: 1025694-BLK1 Acquired: 12/15/2010 11:59:07 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0011**	**.0017**
Stddev	.0011	.0002
%RSD	98.89	13.41
#1	.0024	.0020
#2	.0007	.0016
#3	.0003	.0016

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**181.73**	**56.702**	**317.37**
Stddev	3.54	4.483	15.94
%RSD	1.9491	7.9065	5.0222
#1	181.96	54.587	311.75
#2	178.08	53.669	305.00
#3	185.15	61.852	335.35

Sample Name: 1025694-BS1 Acquired: 12/15/2010 12:06:45 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.584**	**2.729**	**2.583**	**2.605**	**2.628**	**2.727**	**2.531**	**12.70**
Stddev	.026	.013	.012	.006	.016	.009	.028	.28
%RSD	.9985	.4923	.4508	.2378	.6204	.3112	1.090	2.195
#1	2.605	2.743	2.575	2.598	2.611	2.717	2.504	12.48
#2	2.592	2.726	2.577	2.608	2.644	2.730	2.529	12.61
#3	2.555	2.717	2.596	2.608	2.630	2.733	2.559	13.02

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.608**	**2.596**	**2.667**	**2.773**	**2.831**	**2.991**	**24.22**	**2.773**
Stddev	.005	.001	.032	.042	.012	.041	.31	.018
%RSD	.1867	.0436	1.211	1.508	.4062	1.363	1.274	.6296
#1	2.613	2.596	2.658	2.804	2.835	3.038	24.01	2.756
#2	2.605	2.597	2.641	2.789	2.818	2.968	24.07	2.771
#3	2.605	2.595	2.703	2.725	2.839	2.967	24.58	2.791

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.553**	**2.602**	**2.650**	**2.750**	**12.89**	**2.538**	**2.683**	**2.554**
Stddev	.054	.045	.025	.014	.03	.010	.020	.006
%RSD	2.117	1.718	.9597	.5045	.2114	.4047	.7332	.2283
#1	2.510	2.572	2.648	2.752	12.89	2.530	2.692	2.561
#2	2.535	2.580	2.627	2.763	12.87	2.533	2.697	2.550
#3	2.613	2.653	2.677	2.736	12.92	2.549	2.661	2.552

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.530**	**2.616**	**2.680**	**25.42**	**2.541**	**2.530**	**2.722**	**2.562**
Stddev	.010	.016	.012	.05	.010	.035	.028	.013
%RSD	.3858	.6273	.4309	.1812	.3822	1.390	1.029	.5219
#1	2.521	2.597	2.679	25.45	2.540	2.490	2.747	2.546
#2	2.541	2.628	2.693	25.37	2.532	2.542	2.727	2.569
#3	2.528	2.621	2.670	25.44	2.551	2.557	2.692	2.571

Sample Name: 1025694-BS1 Acquired: 12/15/2010 12:06:45 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**2.596**	**2.836**
Stddev	.014	.018
%RSD	.5456	.6198
#1	2.595	2.846
#2	2.582	2.846
#3	2.610	2.816

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**198.64**	**61.236**	**350.42**
Stddev	.34	3.417	14.60
%RSD	.17011	5.5802	4.1670
#1	198.28	63.220	364.20
#2	198.95	63.197	351.95
#3	198.69	57.290	335.11

Sample Name: 1025694-BSD1 Acquired: 12/15/2010 12:14:06 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.593**	**2.742**	**2.595**	**2.649**	**2.684**	**2.776**	**2.578**	**12.69**
Stddev	.018	.010	.077	.009	.009	.001	.013	.01
%RSD	.6892	.3619	2.972	.3375	.3397	.0469	.4935	.1119
#1	2.605	2.739	2.511	2.647	2.689	2.776	2.572	12.68
#2	2.601	2.734	2.614	2.640	2.674	2.775	2.570	12.70
#3	2.573	2.753	2.662	2.658	2.690	2.777	2.593	12.67

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.608**	**2.618**	**2.646**	**2.775**	**2.669**	**2.836**	**24.22**	**2.816**
Stddev	.009	.003	.020	.019	.025	.051	.24	.007
%RSD	.3395	.1030	.7699	.6981	.9512	1.807	1.003	.2627
#1	2.617	2.621	2.657	2.794	2.684	2.893	24.35	2.811
#2	2.606	2.618	2.658	2.776	2.683	2.822	23.94	2.812
#3	2.600	2.616	2.622	2.755	2.640	2.793	24.37	2.824

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.572**	**2.621**	**2.627**	**2.770**	**12.91**	**2.553**	**2.714**	**2.560**
Stddev	.004	.005	.015	.004	.06	.007	.007	.008
%RSD	.1362	.2041	.5653	.1495	.4668	.2619	.2617	.3142
#1	2.571	2.625	2.632	2.774	12.94	2.559	2.720	2.569
#2	2.569	2.615	2.639	2.766	12.96	2.546	2.706	2.558
#3	2.576	2.623	2.610	2.771	12.84	2.553	2.715	2.553

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.588**	**2.660**	**2.718**	**25.58**	**2.552**	**2.576**	**2.721**	**2.593**
Stddev	.004	.004	.006	.19	.006	.012	.020	.004
%RSD	.1481	.1510	.2167	.7534	.2329	.4632	.7283	.1734
#1	2.590	2.664	2.725	25.64	2.549	2.568	2.737	2.590
#2	2.583	2.656	2.715	25.74	2.559	2.570	2.727	2.598
#3	2.590	2.661	2.713	25.37	2.549	2.589	2.699	2.591

Sample Name: 1025694-BSD1 Acquired: 12/15/2010 12:14:06 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**2.578**	**2.854**
Stddev	.009	.006
%RSD	.3527	.2163
#1	2.580	2.860
#2	2.586	2.848
#3	2.568	2.854

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**203.26**	**65.529**	**368.04**
Stddev	.69	.156	10.94
%RSD	.33839	.23820	2.9728
#1	204.05	65.666	379.04
#2	202.84	65.359	357.16
#3	202.88	65.561	367.92

Sample Name: SEQ-CCV@-10L0362 Acquired: 12/15/2010 13:13:06 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.009**	**10.04**	**9.994**	**5.018**	**5.064**	**5.300**	**4.898**	**10.00**
Stddev	.026	.14	.121	.011	.015	.022	.034	.12
%RSD	2.551	1.428	1.211	.2241	.2985	.4122	.6868	1.200
#1	1.027	10.13	9.865	5.006	5.062	5.281	4.859	9.864
#2	1.021	10.11	10.11	5.020	5.050	5.295	4.918	10.08
#3	.9797	9.875	10.01	5.029	5.080	5.324	4.917	10.06
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.928**	**4.936**	**5.182**	**5.022**	**10.15**	**10.36**	**9.174**	**4.935**
Stddev	.051	.033	.108	.109	.25	.30	.049	.024
%RSD	1.025	.6740	2.075	2.173	2.456	2.914	.5320	.4930
#1	4.900	4.918	5.196	5.131	10.25	10.48	9.119	4.919
#2	4.987	4.975	5.282	5.022	10.34	10.59	9.190	4.924
#3	4.898	4.917	5.068	4.913	9.868	10.02	9.213	4.963
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV@-10L0362 Acquired: 12/15/2010 13:13:06 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.707**	**10.02**	^F *****	**5.082**	**9.984**	**4.866**	**5.111**	**4.940**
Stddev	.119	.05	-----	.018	.061	.038	.034	.050
%RSD	1.229	.5450	-----	.3558	.6092	.7869	.6718	1.006
#1	9.570	9.997	4.944	5.084	9.979	4.837	5.131	4.922
#2	9.767	10.08	^ -----	5.098	10.05	4.909	5.132	4.997
#3	9.785	9.984	^ -----	5.062	9.926	4.851	5.072	4.903
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			5.000					
Range			-10.00%					

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.030**	**5.060**	**5.178**	**10.39**	**4.902**	**4.835**	s **4.979**	**4.944**
Stddev	.006	.025	.008	.23	.042	.077	.147	.029
%RSD	.1247	.5020	.1466	2.174	.8519	1.591	2.947	.5806
#1	5.026	5.046	5.186	10.50	4.867	4.761	5.127	4.917
#2	5.027	5.045	5.177	10.54	4.949	4.830	s 4.976	4.974
#3	5.037	5.090	5.170	10.13	4.891	4.915	4.833	4.942
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV@-10L0362 Acquired: 12/15/2010 13:13:06 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**4.905**	**5.221**
Stddev	.093	.036
%RSD	1.897	.6897
#1	4.955	5.243
#2	4.961	5.241
#3	4.797	5.180
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**201.21**	**64.278**	**362.10**
Stddev	4.29	1.797	16.90
%RSD	2.1320	2.7952	4.6668
#1	205.08	65.985	376.42
#2	196.60	62.404	343.46
#3	201.95	64.446	366.40

Sample Name: SEQ-CCB Acquired: 12/15/2010 13:20:27 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0037**	**-.0800**	**-.0008**	**.0214**	**.0002**	**.0000**	**-.0039**
Stddev	.0024	.0046	.0123	.0003	.0049	.0009	.000	.0072
%RSD	674.6	124.5	15.40	39.38	22.80	524.2	1011.	187.5
#1	.0021	-.0014	-.0802	-.0005	.0270	-.0005	.0001	-.0115
#2	-.0027	.0075	-.0676	-.0008	.0182	-.0001	-.0001	-.0029
#3	-.0005	.0049	-.0923	-.0011	.0190	.0012	.0000	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0000**	**-.0006**	**.0008**	**.0024**	**.0256**	**-.0206**	**.0023**
Stddev	.0001	.000	.0009	.0011	.0010	.0306	.0501	.0013
%RSD	68.06	5935.	150.1	126.9	40.80	119.8	243.6	56.57
#1	-.0003	.0002	-.0011	.0013	.0035	.0604	-.0750	.0032
#2	-.0002	-.0003	.0004	.0015	.0018	.0028	.0235	.0008
#3	.0000	.0001	-.0011	-.0004	.0019	.0135	-.0101	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 12/15/2010 13:20:27 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**-.0013**	**.0003**	**.0026**	**.0884**	**-.0002**	**.0019**	**.0036**
Stddev	.0004	.0041	.0002	.0006	.0136	.0006	.0004	.0020
%RSD	55.34	317.9	52.84	24.51	15.36	268.5	20.13	54.23
#1	.0005	-.0036	.0005	.0033	.1030	-.0001	.0022	.0014
#2	.0011	-.0037	.0001	.0022	.0761	-.0009	.0015	.0051
#3	.0004	.0034	.0004	.0022	.0860	.0003	.0021	.0044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0023**	**.0049**	**.0020**	**.0106**	**.0007**	**.0003**	**.0000**	**.0000**
Stddev	.0017	.0018	.0016	.0053	.0007	.0002	.001	.0103
%RSD	75.57	35.79	81.34	49.67	97.72	82.66	1913.	78880.
#1	-.0018	.0066	.0037	.0165	.0003	.0000	.0007	-.0089
#2	-.0041	.0051	.0004	.0093	.0003	.0005	-.0009	.0112
#3	-.0008	.0031	.0019	.0061	.0014	.0003	.0000	-.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 12/15/2010 13:20:27 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**-.0015**	**.0015**
Stddev	.0008	.0001
%RSD	50.04	7.545
#1	-.0007	.0015
#2	-.0018	.0013
#3	-.0021	.0016
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**192.93**	**60.229**	**337.50**
Stddev	1.06	1.216	6.94
%RSD	.55086	2.0184	2.0570
#1	191.97	61.500	345.40
#2	192.75	60.109	334.69
#3	194.07	59.078	332.40

Sample Name: 1025694-SRD1 Acquired: 12/15/2010 13:35:50 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Dup (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	**.2266**	**-.0071**	**-.0018**	**.1596**	**.0169**	**-.0003**	**50.16**
Stddev	.0010	.0116	.0357	.0018	.0040	.0008	.0002	.18
%RSD	55.71	5.114	500.2	102.0	2.518	4.508	80.61	.3594
#1	.0007	.2240	.0332	.0000	.1568	.0175	-.0005	50.02
#2	.0027	.2393	-.0200	-.0036	.1642	.0173	-.0003	50.11
#3	.0022	.2166	-.0347	-.0018	.1578	.0161	.0000	50.36

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**-.0002**	**.6262**	**.0000**	**.1383**	**.1488**	**1.070**	**.0144**
Stddev	.0001	.0005	.0071	.001	.0045	.0168	.093	.0026
%RSD	19.00	305.7	1.134	4024.	3.224	11.31	8.735	18.42
#1	-.0004	-.0002	.6295	.0007	.1434	.1324	1.062	.0163
#2	-.0006	-.0006	.6181	.0006	.1351	.1480	1.166	.0114
#3	-.0006	.0004	.6311	-.0013	.1365	.1661	.9800	.0154

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.981**	**9.323**	**.1066**	**-.0002**	**41.41**	**.0008**	**.0137**	**-.0005**
Stddev	.048	.017	.0019	.0000	.36	.0003	.0017	.0016
%RSD	.5351	.1859	1.779	14.66	.8725	38.34	12.36	342.0
#1	8.949	9.316	.1086	-.0003	41.09	.0011	.0136	-.0009
#2	8.958	9.342	.1048	-.0002	41.34	.0005	.0120	.0013
#3	9.036	9.309	.1065	-.0002	41.80	.0008	.0154	-.0018

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.58**	**.0061**	**.0022**	**2.949**	**-.0023**	**.0445**	**.0048**	**-.0002**
Stddev	.15	.0004	.0014	.049	.0011	.0011	.0012	.0043
%RSD	1.433	6.651	61.79	1.648	45.85	2.511	24.55	1756.
#1	10.41	.0057	.0009	2.926	-.0011	.0436	.0050	.0030
#2	10.68	.0065	.0036	2.915	-.0030	.0441	.0059	.0014
#3	10.66	.0062	.0021	3.004	-.0030	.0458	.0036	-.0051

Sample Name: 1025694-SRD1 Acquired: 12/15/2010 13:35:50 Type: Unk
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Dup (12/10) Analyst: HB Instrument: IRIS3
Comment: 12/11 AQ 6010 L

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**-.0004**	**.0068**
Stddev	.0006	.0002
%RSD	169.8	2.581
#1	.0003	.0066
#2	-.0010	.0070
#3	-.0004	.0068

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**195.66**	**61.548**	**338.01**
Stddev	3.74	2.655	5.18
%RSD	1.9133	4.3144	1.5319
#1	191.34	58.950	334.30
#2	197.81	61.436	343.93
#3	197.83	64.257	335.80

Sample Name: SEQ-CRL@-10L0214 Acquired: 12/15/2010 14:21:30 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0133**	**.0541**	**.0506**	**.0082**	**.1022**	**.0105**	**.0039**	**.2433**
Stddev	.0011	.0112	.0533	.0003	.0025	.0007	.0001	.0109
%RSD	8.562	20.73	105.4	3.476	2.455	6.955	2.801	4.499
#1	.0123	.0476	.0747	.0083	.1001	.0097	.0038	.2528
#2	.0131	.0671	-.0105	.0079	.1014	.0105	.0040	.2457
#3	.0146	.0477	.0875	.0085	.1050	.0111	.0039	.2313
Check ?	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0100							
Range	30.00%							

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047**	**.0097**	F **.0139**	**.0099**	**.0349**	**.0334**	**.8413**	**.0445**
Stddev	.0002	.0003	.0035	.0014	.0002	.0237	.1119	.0035
%RSD	4.147	3.197	25.21	14.28	.5306	70.92	13.31	7.898
#1	.0048	.0096	.0126	.0091	.0347	.0506	.9600	.0414
#2	.0049	.0100	.0178	.0090	.0348	.0064	.7376	.0438
#3	.0045	.0094	.0112	.0115	.0350	.0433	.8263	.0483
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value			.0100					
Range			30.00%					

Sample Name: SEQ-CRL@-10L0214 Acquired: 12/15/2010 14:21:30 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0271**	**.0247**	**.0043**	**.0087**	F **.7265**	**.0115**	**.0540**	**.0186**
Stddev	.0030	.0052	.0005	.0002	.0359	.0003	.0006	.0004
%RSD	11.14	21.15	10.94	2.765	4.935	2.897	1.089	2.009
#1	.0301	.0305	.0041	.0089	.7540	.0113	.0537	.0190
#2	.0270	.0232	.0049	.0085	.7396	.0119	.0546	.0185
#3	.0241	.0204	.0040	.0088	.6860	.0113	.0536	.0183
Check ?	Chk Fail	None	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value	.0200				.5000			
Range	30.00%				30.00%			

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.1217**	F **.0074**	**.0260**	**1.072**	**.0101**	**.0097**	**.0109**	**.0121**
Stddev	.0228	.0025	.0026	.025	.0004	.0002	.0003	.0012
%RSD	18.75	33.77	10.07	2.316	4.077	2.254	2.597	10.26
#1	.1125	.0096	.0231	1.081	.0106	.0095	.0107	.0132
#2	.1476	.0047	.0283	1.091	.0098	.0099	.0108	.0124
#3	.1048	.0079	.0266	1.044	.0101	.0096	.0112	.0108
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0100	.0120						
Range	30.00%	-30.00%						

Sample Name: SEQ-CRL@-10L0214 Acquired: 12/15/2010 14:21:30 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0111**	**.0119**
Stddev	.0012	.0002
%RSD	10.89	1.781
#1	.0109	.0117
#2	.0099	.0121
#3	.0123	.0119
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**196.89**	**62.441**	**347.41**
Stddev	2.62	.867	6.61
%RSD	1.3315	1.3881	1.9035
#1	195.55	62.093	353.98
#2	199.91	63.428	347.50
#3	195.21	61.803	340.75

Sample Name: SEQ-IFA@-10L0035 Acquired: 12/15/2010 14:28:58 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	^ *****	**123.4**	**.0025**	**.0096**	**.0001**	**-.0002**	**123.2**
Stddev	.0012	-----	.9	.0015	.0035	.0005	.0001	1.4
%RSD	91.91	-----	.7498	59.46	36.35	473.7	65.53	1.116
#1	.0001	129.4	122.5	.0027	.0100	.0003	.0000	121.8
#2	.0014	^ -----	123.4	.0009	.0128	-.0005	-.0002	123.1
#3	.0025	^ -----	124.3	.0038	.0059	.0005	-.0002	124.6
Check ?	None	None	Chk Pass	None	None	None	None	Chk Pass
Value								
Range								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0006**	**-.0010**	**.0015**	^ *****	**50.82**	**.0280**	**.0010**
Stddev	.0002	.0003	.0011	.0006	-----	.52	.1204	.0039
%RSD	24.52	43.72	108.4	37.68	-----	1.024	429.8	403.1
#1	.0008	.0003	-.0018	.0013	49.00	51.42	.0964	-.0026
#2	.0008	.0008	.0002	.0010	^ -----	50.62	.0986	.0051
#3	.0005	.0007	-.0015	.0021	^ -----	50.43	-.1110	.0004
Check ?	None	None	None	None	None	Chk Pass	None	None
Value								
Range								

Sample Name: SEQ-IFA@-10L0035 Acquired: 12/15/2010 14:28:58 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**83.58**	**123.3**	**-.0013**	**-.0019**	**.2959**	**-.0022**	**.0145**	**.0032**
Stddev	1.45	.4	.0003	.0005	.0263	.0004	.0018	.0003
%RSD	1.740	.2863	20.03	28.68	8.873	18.13	12.42	10.95
#1	82.39	123.2	-.0012	-.0013	.3167	-.0021	.0162	.0033
#2	83.15	123.1	-.0015	-.0020	.2664	-.0026	.0126	.0035
#3	85.20	123.7	-.0010	-.0023	.3045	-.0018	.0148	.0028
Check ?	None	Chk Pass	None	None	None	None	None	None
Value								
Range								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0069**	**-.0041**	**.0038**	**.0226**	**-.0008**	**-.0353**	**-.0011**	**.0071**
Stddev	.0032	.0024	.0032	.0042	.0014	.0003	.0006	.0025
%RSD	46.15	58.32	84.54	18.52	191.1	.7937	51.48	35.59
#1	.0097	-.0015	.0075	.0261	.0003	-.0350	-.0005	.0076
#2	.0035	-.0062	.0016	.0237	-.0002	-.0355	-.0017	.0092
#3	.0074	-.0047	.0023	.0180	-.0024	-.0355	-.0010	.0043
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Sample Name: SEQ-IFA@-10L0035 Acquired: 12/15/2010 14:28:58 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0009**	**.0049**
Stddev	.0030	.0001
%RSD	314.1	2.492
#1	.0016	.0049
#2	.0035	.0051
#3	-.0023	.0048
Check ?	None	None
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**194.50**	**64.192**	**351.09**
Stddev	.25	1.478	7.66
%RSD	.12777	2.3019	2.1813
#1	194.57	65.433	358.95
#2	194.71	64.587	350.67
#3	194.23	62.558	343.65

Sample Name: SEQ-IFB@-10L0036 Acquired: 12/15/2010 14:36:38 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5262**	**61.26**	**59.39**	**.0014**	**.0006**	**.2540**	**.2385**	**60.34**
Stddev	.0032	.11	.47	.0016	.0014	.0006	.0013	.30
%RSD	.6176	.1842	.7903	116.9	237.0	.2520	.5452	.4918
#1	.5299	61.24	59.17	.0032	-.0005	.2544	.2380	60.34
#2	.5250	61.16	59.08	.0004	.0000	.2544	.2376	60.05
#3	.5237	61.39	59.93	.0005	.0022	.2533	.2400	60.64
Check ?	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4961**	**.2301**	**.2563**	**.2599**	**24.65**	**24.80**	**.0243**	**.0001**
Stddev	.0023	.0008	.0018	.0012	.10	.13	.0267	.0018
%RSD	.4726	.3417	.6885	.4717	.3939	.5251	109.9	3183.
#1	.4988	.2299	.2546	.2604	24.75	24.95	.0454	-.0019
#2	.4951	.2295	.2561	.2608	24.56	24.76	-.0057	.0004
#3	.4944	.2310	.2581	.2585	24.62	24.70	.0333	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	None	None
Value								
Range								

Sample Name: SEQ-IFB@-10L0036 Acquired: 12/15/2010 14:36:38 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.93**	**60.75**	**.2509**	**-.0019**	**.2044**	**.4620**	**.0084**	**.4892**
Stddev	.57	.09	.0011	.0007	.0324	.0026	.0008	.0033
%RSD	1.169	.1554	.4189	34.66	15.84	.5545	9.355	.6733
#1	49.40	60.83	.2508	-.0018	.1719	.4625	.0087	.4930
#2	49.09	60.77	.2500	-.0013	.2048	.4592	.0075	.4875
#3	48.29	60.64	.2520	-.0026	.2366	.4643	.0090	.4871
Check ?	None	Chk Pass	Chk Pass	None	None	Chk Pass	None	Chk Pass
Value								
Range								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0039**	**.0017**	**.0020**	**.0024**	**-.0033**	**-.0167**	**.0001**	**.0119**
Stddev	.0030	.0015	.0019	.0017	.0007	.0000	.0008	.0022
%RSD	75.27	87.81	93.78	69.80	19.66	.1499	892.3	18.36
#1	.0023	.0010	.0020	.0042	-.0027	-.0167	.0007	.0143
#2	.0073	.0007	.0001	.0021	-.0032	-.0167	-.0008	.0100
#3	.0021	.0034	.0039	.0009	-.0040	-.0167	.0004	.0116
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Sample Name: SEQ-IFB@-10L0036 Acquired: 12/15/2010 14:36:38 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.2481**	**.5492**
Stddev	.0022	.0018
%RSD	.8794	.3262
#1	.2496	.5513
#2	.2456	.5483
#3	.2490	.5481
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**197.70**	**62.147**	**342.99**
Stddev	1.81	.158	10.85
%RSD	.91785	.25449	3.1646
#1	199.79	61.968	355.46
#2	196.55	62.207	337.90
#3	196.76	62.267	335.62

Sample Name: SEQ-CCV@-10L0362 Acquired: 12/15/2010 14:44:15 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.037**	**10.15**	**9.866**	**4.979**	**4.995**	**5.195**	**4.786**	**9.937**
Stddev	.008	.03	.107	.045	.048	.071	.088	.098
%RSD	.7993	.2603	1.084	.9104	.9605	1.370	1.843	.9846
#1	1.046	10.17	9.758	4.980	5.001	5.119	4.713	9.843
#2	1.032	10.17	9.868	4.933	4.944	5.206	4.761	9.928
#3	1.032	10.12	9.972	5.024	5.040	5.260	4.884	10.04
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.013**	**4.925**	**5.258**	**5.083**	**10.37**	**10.64**	**9.116**	**4.807**
Stddev	.058	.039	.088	.035	.21	.28	.265	.080
%RSD	1.150	.7960	1.679	.6967	1.983	2.661	2.902	1.668
#1	5.062	4.969	5.354	5.116	10.59	10.94	9.117	4.745
#2	5.027	4.912	5.240	5.046	10.32	10.60	8.852	4.778
#3	4.949	4.894	5.180	5.088	10.19	10.38	9.381	4.897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV@-10L0362 Acquired: 12/15/2010 14:44:15 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.647**	**10.09**	**4.867**	**5.113**	**9.907**	**4.850**	**5.142**	**4.989**
Stddev	.113	.06	.205	.033	.118	.031	.048	.049
%RSD	1.172	.5846	4.206	.6444	1.190	.6378	.9291	.9779
#1	9.528	10.02	5.097	5.142	9.826	4.883	5.195	5.036
#2	9.658	10.12	4.798	5.077	9.852	4.845	5.102	4.993
#3	9.753	10.13	4.706	5.119	10.04	4.821	5.130	4.938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.953**	**4.996**	**5.165**	**10.63**	**4.904**	**4.672**	s **5.134**	**4.940**
Stddev	.051	.067	.037	.17	.036	.107	.103	.015
%RSD	1.035	1.333	.7166	1.602	.7274	2.286	2.002	.2939
#1	4.945	4.988	5.183	10.82	4.935	4.569	5.247	4.956
#2	4.907	4.933	5.123	10.57	4.913	4.665	s 5.106	4.935
#3	5.008	5.066	5.190	10.50	4.865	4.782	s 5.047	4.928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: SEQ-CCV@-10L0362 Acquired: 12/15/2010 14:44:15 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**4.951**	**5.250**
Stddev	.054	.047
%RSD	1.092	.8957
#1	5.011	5.295
#2	4.936	5.201
#3	4.905	5.256
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**198.03**	**61.674**	**350.08**
Stddev	2.01	2.023	4.52
%RSD	1.0146	3.2803	1.2903
#1	197.69	59.952	349.37
#2	196.22	63.902	345.96
#3	200.19	61.168	354.91

Sample Name: SEQ-CCB Acquired: 12/15/2010 14:51:36 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0012**	**.0027**	**-.0372**	**.0009**	**.0207**	**.0048**	F **.0041**	**.0452**
Stddev	.0010	.0150	.0311	.0029	.0055	.0061	.0061	.0710
%RSD	89.46	561.0	83.64	333.6	26.43	128.3	147.8	157.0
#1	-.0003	-.0141	-.0549	.0027	.0265	.0012	.0008	-.0021
#2	-.0009	.0075	-.0013	-.0025	.0197	.0119	.0111	.1268
#3	-.0023	.0147	-.0554	.0024	.0157	.0013	.0004	.0109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0040	
Low Limit							-.0040	

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0001**	**.0017**	**.0008**	**.0032**	**-.0103**	**.0031**	**.0014**
Stddev	.0000	.0003	.0010	.0007	.0008	.0242	.1290	.0036
%RSD	23.91	395.7	58.96	89.89	23.78	236.3	4136.	257.7
#1	.0001	.0002	.0013	.0012	.0037	-.0107	.0177	-.0010
#2	.0001	-.0002	.0010	.0012	.0036	-.0343	-.1326	.0055
#3	.0001	.0002	.0028	.0000	.0023	.0142	.1242	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 12/15/2010 14:51:36 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0253**	**.0282**	**.0008**	**.0025**	**.1478**	**-.0003**	**.0073**	**.0003**
Stddev	.0390	.0461	.0000	.0002	.0717	.0010	.0017	.0024
%RSD	154.3	163.4	5.942	9.615	48.50	309.1	22.89	875.3
#1	.0034	.0034	.0007	.0027	.1482	.0007	.0054	.0019
#2	.0704	.0815	.0008	.0023	.2193	-.0013	.0084	.0015
#3	.0021	-.0002	.0008	.0026	.0760	-.0004	.0081	-.0025
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0200							
Low Limit	-.0200							

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0012**	**.0059**	**.0019**	**.0119**	**-.0003**	**.0039**	**.0003**	**-.0046**
Stddev	.0013	.0029	.0038	.0059	.0012	.0059	.0002	.0081
%RSD	105.0	48.76	201.9	49.38	360.5	152.1	65.85	174.6
#1	-.0018	.0034	.0001	.0178	-.0003	.0005	.0003	-.0014
#2	.0002	.0052	-.0007	.0118	.0008	.0107	.0001	-.0138
#3	-.0021	.0090	.0063	.0060	-.0015	.0004	.0005	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: SEQ-CCB Acquired: 12/15/2010 14:51:36 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: HB Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0008**	**.0026**
Stddev	.0026	.0004
%RSD	336.1	13.91
#1	.0017	.0022
#2	.0028	.0027
#3	-.0021	.0029
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**190.92**	**58.914**	**330.84**
Stddev	2.23	1.703	16.81
%RSD	1.1692	2.8911	5.0805
#1	192.97	59.507	345.21
#2	188.54	56.994	312.35
#3	191.27	60.242	334.94

RRan only for Ag, Cr

Sample Name: SEQ-CRL@-10L0214 Acquired: 12/15/2010 14:59:08 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: TBG Instrument: IRIS3
Comment:

Elem	Ag3280	Al3961-L	Al3961-H	As1890	B_2088	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0128**	**.0514**	**.0196**	F **.0106**	**.1041**	**.0105**	**.0039**	**.2234**
Stddev	.0026	.0077	.0051	.0002	.0017	.0005	.0002	.0144
%RSD	20.30	14.98	25.81	2.263	1.648	5.233	4.157	6.445
#1	.0159	.0435	.0185	.0104	.1043	.0111	.0040	.2339
#2	.0112	.0518	.0152	.0109	.1057	.0102	.0037	.2070
#3	.0114	.0589	.0251	.0105	.1023	.0102	.0040	.2294
Check ?	Chk Pass	Chk Pass	None	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.0080				
Range				30.00%				

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2599-L	Fe2714-H	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048**	**.0098**	**.0122**	**.0114**	**.0373**	**.0247**	**.8301**	**.0448**
Stddev	.0001	.0002	.0009	.0017	.0006	.0267	.0624	.0022
%RSD	2.071	1.748	7.729	14.72	1.617	108.2	7.522	4.970
#1	.0049	.0100	.0112	.0096	.0380	.0406	.9009	.0431
#2	.0047	.0097	.0122	.0118	.0368	-.0062	.7830	.0441
#3	.0048	.0098	.0130	.0129	.0372	.0397	.8063	.0473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
Value								
Range								

RRan only for Ag, Cr

Sample Name: SEQ-CRL@-10L0214 Acquired: 12/15/2010 14:59:08 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: TBG Instrument: IRIS3
Comment:

Elem	Mg2795-L	Mg2852-H	Mn2576	Mo2020	Na5895	Ni2316	P_1782	Pb2203
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0212**	**.0182**	**.0043**	**.0094**	**.5752**	**.0120**	**.0523**	**.0170**
Stddev	.0004	.0057	.0000	.0002	.0274	.0002	.0019	.0012
%RSD	2.049	31.40	1.047	1.778	4.760	1.520	3.548	7.269
#1	.0215	.0244	.0043	.0096	.6062	.0117	.0542	.0181
#2	.0207	.0169	.0044	.0092	.5542	.0121	.0505	.0173
#3	.0215	.0132	.0043	.0095	.5653	.0120	.0524	.0157
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0986**	F **.0057**	**.0264**	**1.024**	**.0120**	**.0095**	**.0111**	F **.0166**
Stddev	.0029	.0009	.0007	.017	.0005	.0002	.0003	.0029
%RSD	2.897	16.29	2.469	1.610	4.267	1.983	2.470	17.50
#1	.0980	.0067	.0272	1.039	.0116	.0094	.0113	.0193
#2	.0960	.0049	.0259	1.025	.0118	.0094	.0108	.0135
#3	.1017	.0056	.0263	1.006	.0125	.0097	.0113	.0168
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
Value	.0100	.0120						.0100
Range	30.00%	-30.00%						30.00%

Sample Name: SEQ-CRL@-10L0214 Acquired: 12/15/2010 14:59:08 Type: QC
Method: V-GROOVE 14 Mode: CONC Corr. Factor: 1.000000
User: admin Sample ID: Analyst: TBG Instrument: IRIS3
Comment:

Elem	V_2924	Zn2138
Units	ppm	ppm
Avg	**.0087**	F **.0133**
Stddev	.0003	.0002
%RSD	3.721	1.832
#1	.0084	.0135
#2	.0085	.0130
#3	.0090	.0133

Check ?	Chk Pass	Chk Fail
Value		.0100
Range		30.00%

Int. Std.	Y_2243	Y_3600	Y_3611
Units	Cts/S	Cts/S	Cts/S
Avg	**199.46**	**61.782**	**350.49**
Stddev	2.19	1.500	7.93
%RSD	1.0999	2.4281	2.2616
#1	201.99	60.165	357.56
#2	198.32	62.053	341.92
#3	198.07	63.128	351.99

Inorganics
Method 6010B

Data Processing Summary

1600

PREPARATION BENCH SHEET

1025694

Spectrum Analytical, Inc. - Agawam, MA

Matrix: Aqueous **Prepared using: Metals - SW846 3005A**

Lab Number	Prepared	Initial (ml)	Final (ml)	Source ID	Spike ID	ul Spike	Spike 2 ID	ul Spike 2	Comments	Client ID	Collected	Due
1025694-BLK1	11-Dec-10 10:00	50	25							Blank	11-Dec-10 10:00	
1025694-BS1	11-Dec-10 10:00	50	25		10K0900	2500				LCS	11-Dec-10 10:00	
1025694-BSD1	11-Dec-10 10:00	50	25		10K0900	2500				LCS Dup	11-Dec-10 10:00	
1025694-DUP1	11-Dec-10 10:00	50	25	SB21795-03						Duplicate	02-Dec-10 09:30	
1025694-MS1	11-Dec-10 10:00	50	25	SB21801-01	10K0900	2500				Matrix Spike	02-Dec-10 09:25	
1025694-MSD1	11-Dec-10 10:00	50	25	SB21801-01	10K0900	2500				Matrix Spike Dup	02-Dec-10 09:25	
1025694-PS1	11-Dec-10 10:00	50	25	SB21801-01	10K0900	2500				Post Spike	02-Dec-10 09:25	
SB21795-03	11-Dec-10 10:00	50	25							MTL	02-Dec-10 09:30	**13-Dec-10 16:00**
Ag Total ICP 6010B	*Cd Total ICP 6010B*	*Cr Total ICP 6010B*	*Cu Total ICP 6010B*	*Ni Total ICP 6010B*	*Pb Total ICP 6010B*	*Zn Total ICP 6010B*						
SB21801-01	11-Dec-10 10:00	50	25							RIZ-7-GW	02-Dec-10 09:25	**13-Dec-10 16:00**
Fe Total ICP 6010B												
MCP CAM/GW-1												
SB21801-05	11-Dec-10 10:00	50	25							MW-00-1	02-Dec-10 10:25	**13-Dec-10 16:00**
Fe Total ICP 6010B												
MCP CAM/GW-1												
SB21801-10	11-Dec-10 10:00	50	25							RIZ-3-GW	02-Dec-10 10:10	**13-Dec-10 16:00**
Fe Total ICP 6010B												
MCP CAM/GW-1												
SB21844-01	11-Dec-10 10:00	50	25							Dup (12/10)	30-Nov-10 10:00	**10-Dec-10 16:00**
Cr Total ICP 6010B	+SRD											
ASP B/NY stnds/report J&U flags												
SB21844-02	11-Dec-10 10:00	50	25							MW-6 (12/10)	30-Nov-10 10:45	**10-Dec-10 16:00**
Cr Total ICP 6010B												
ASP B/NY stnds/report J&U flags												
SB21844-03	11-Dec-10 10:00	50	25							MW-8 (12/10)	30-Nov-10 13:45	**10-Dec-10 16:00**
Cr Total ICP 6010B												
ASP B/NY stnds/report J&U flags												

12-15-10
Analyst Reviewed Date

HB 12-15-10
Manager Reviewed Date

Laura Rivera 12/11/10
Prepared By Date

PREPARATION BENCH SHEET

1025694

Spectrum Analytical, Inc. - Agawam, MA

Matrix: Aqueous

Prepared using: Metals - SW846 3005A

Lab Number	Prepared	Initial (ml)	Final (ml)	Source ID	Spike ID	ul Spike	Spike 2 ID	ul Spike 2	Comments	Client ID	Collected	Due
SB21844-04	11-Dec-10 10:00	50	25							MW-5 (12/10)	30-Nov-10 11:35	**10-Dec-10 16:00**
Cr Total ICP 6010B												
ASP B/NY stnds/report J&U flags												
SB21844-05	11-Dec-10 10:00	50	25							MW-4 (12/10)	30-Nov-10 12:45	**10-Dec-10 16:00**
Cr Total ICP 6010B												
ASP B/NY stnds/report J&U flags												

12/11 AQ 6010 Metals L

Analyst Reviewed Date

Manager Reviewed Date

Prepared By Date

FORM VIII(Organics)/FORM XIII(Inorganics)
ANALYSIS BATCH (SEQUENCE) SUMMARY
SW846 6010C

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA	SDG:	21844
Client:	Environmental Resources Management - Dewitt, N	Project:	Former Banknote Facility-Suffern, NY
Sequence:	S011625	Instrument:	Iris 3
		Calibration:	UNASSIGNED

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Initial Cal Check	S011625-ICV1	20101215-011	12/15/10 10:04
Initial Cal Blank	S011625-ICB1	20101215-012	12/15/10 10:11
Instrument RL Check	S011625-CRL1	20101215-014	12/15/10 10:40
Interference Check A	S011625-IFA1	20101215-016	12/15/10 10:55
Interference Check B	S011625-IFB1	20101215-017	12/15/10 11:03
Calibration Check	S011625-CCV1	20101215-018	12/15/10 11:11
Calibration Blank	S011625-CCB1	20101215-019	12/15/10 11:18
Blank	1025694-BLK1	20101215-021	12/15/10 11:59
LCS	1025694-BS1	20101215-022	12/15/10 12:06
LCS Dup	1025694-BSD1	20101215-023	12/15/10 12:14
Calibration Check	S011625-CCV2	20101215-031	12/15/10 13:13
Calibration Blank	S011625-CCB2	20101215-032	12/15/10 13:20
Dup (12/10)	S011625-SRD1	20101215-034	12/15/10 13:35
Dup (12/10)	SB21844-01	20101215-035	12/15/10 13:43
MW-6 (12/10)	SB21844-02	20101215-036	12/15/10 13:50
MW-8 (12/10)	SB21844-03	20101215-037	12/15/10 13:58
MW-5 (12/10)	SB21844-04	20101215-038	12/15/10 14:06
MW-4 (12/10)	SB21844-05	20101215-039	12/15/10 14:13
Instrument RL Check	S011625-CRL2	20101215-040	12/15/10 14:21
Interference Check A	S011625-IFA2	20101215-041	12/15/10 14:28
Interference Check B	S011625-IFB2	20101215-042	12/15/10 14:36
Calibration Check	S011625-CCV3	20101215-043	12/15/10 14:44
Calibration Blank	S011625-CCB3	20101215-044	12/15/10 14:51
Instrument RL Check	S011625-CRL3	20101215-045	12/15/10 14:59

Type	Date/Time	Message	User Name	Application	Sequence Name	Description
	12/15/2010 12:58:00 AM	Running 1025744-MS1 (100)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:06:14 AM	Running SEQ-CCV@-10L0153 (119)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 1:13:37 AM	Running SEQ-CCB (120)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 1:21:09 AM	Running 1025744-PS1 (101)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:29:22 AM	Running SB21840-03 (102)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:37:12 AM	Running SB21840-04 (103)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:45:03 AM	Running SB21840-05 (104)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:53:06 AM	Running SB21840-06 (105)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 2:00:56 AM	Running SB21840-07 (106)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 2:08:59 AM	Running SB21840-08 (107)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 2:16:50 AM	Running SEQ-CCV@-10L0153 (109)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:24:12 AM	Running SEQ-CCB (110)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:31:44 AM	Running SEQ-IFA@-10L0035 (4)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:39:37 AM	Running SEQ-IFB@-10L0036 (5)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:47:14 AM	Running SEQ-CCB (2)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:54:43 AM	Plasma off	admin	TEVA Control Center		
	12/15/2010 2:55:23 AM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Success
	12/15/2010 7:31:01 AM	Plasma On	admin	TEVA Control Center		
	12/15/2010 7:31:05 AM	Plasma ignition successful	admin	Analyst		
	12/15/2010 8:43:13 AM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/15/2010 8:43:13 AM	Sequence Started	admin	Analyst	S_V-GROOVE 14	9 standards, 0 samples
	12/15/2010 8:43:33 AM	Running Blank (1)	admin	Analyst	S_V-GROOVE 14	Cal
	12/15/2010 8:50:03 AM	Running SEQ-10L0214@CRL (2)	admin	Analyst	S_V-GROOVE 14	Cal
	12/15/2010 8:56:33 AM	Running SEQ-10L0099@4 (3)	admin	Analyst	S_V-GROOVE 14	Cal
	12/15/2010 9:03:02 AM	Running SEQ-10L0098@5 (4)	admin	Analyst	S_V-GROOVE 14	Cal
	12/15/2010 9:09:29 AM	Running SEQ-10L0097@5.5 (5)	admin	Analyst	S_V-GROOVE 14	Cal
	12/15/2010 9:15:53 AM	Running SEQ-10K0991@6 (6)	admin	Analyst	S_V-GROOVE 14	Cal
	12/15/2010 9:22:43 AM	Running SEQ-10L0152@7 (7)	admin	Analyst	S_V-GROOVE 14	Cal
	12/15/2010 9:29:49 AM	Running SEQ-10L0215@8 (8)	admin	Analyst	S_V-GROOVE 14	Cal
	12/15/2010 9:36:45 AM	Running SEQ-10L0216@9 (9)	admin	Analyst	S_V-GROOVE 14	Cal
	12/15/2010 9:41:04 AM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Aborted by User
	12/15/2010 10:03:40 AM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/15/2010 10:03:40 AM	Sequence Started	admin	Analyst	S_V-GROOVE 14	8 standards, 0 samples
	12/15/2010 10:04:02 AM	Running SEQ-ICV@-10L0275 (6)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 10:11:38 AM	Running SEQ-ICB (7)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 10:18:51 AM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Aborted by User

Type	Date/Time	Message	User Name	Application	Sequence Name	Description
	12/15/2010 10:40:13 AM	Sequence Started	admin	Analyst	S_V-GROOVE 14	6 standards, 0 samples
	12/15/2010 10:40:13 AM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/15/2010 10:40:34 AM	Running SEQ-CRL@-10L0214 (3)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 10:48:16 AM	Running SEQ-SOILCRL@-10K0544 (	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 10:55:54 AM	Running SEQ-IFA@-10L0035 (4)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 11:03:41 AM	Running SEQ-IFB@-10L0036 (5)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 11:11:26 AM	Running SEQ-CCV@-10L0362 (1)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 11:18:53 AM	Running SEQ-CCB (2)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 11:26:27 AM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Success
	12/15/2010 11:58:47 AM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/15/2010 11:58:47 AM	Sequence Started	admin	Analyst	S_V-GROOVE 14	0 standards, 24 samples
	12/15/2010 11:59:07 AM	Running 1025694-BLK1 (1)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 12:06:45 PM	Running 1025694-BS1 (16)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 12:14:06 PM	Running 1025694-BSD1 (17)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 12:21:26 PM	Running SB21795-03 (2)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 12:28:52 PM	Running 1025694-DUP1 (3)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 12:36:16 PM	Running SB21801-01 (4)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 12:43:41 PM	Running 1025694-MS1 (5)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 12:51:02 PM	Running 1025694-MSD1 (6)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 12:58:22 PM	Running 1025694-PS1 (7)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:05:42 PM	Running SB21801-05 (8)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:13:06 PM	Running SEQ-CCV@-10L0362 (18)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 1:20:27 PM	Running SEQ-CCB (19)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 1:27:58 PM	Running SB21801-10 (9)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:35:50 PM	Running 1025694-SRD1 (10)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:43:15 PM	Running SB21844-01 (11)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:50:55 PM	Running SB21844-02 (12)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 1:58:33 PM	Running SB21844-03 (13)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 2:06:12 PM	Running SB21844-04 (14)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 2:13:52 PM	Running SB21844-05 (15)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 2:21:30 PM	Running SEQ-CRL@-10L0214 (20)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:28:58 PM	Running SEQ-IFA@-10L0035 (23)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:36:38 PM	Running SEQ-IFB@-10L0036 (24)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:44:15 PM	Running SEQ-CCV@-10L0362 (21)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:51:36 PM	Running SEQ-CCB (22)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 2:59:08 PM	Running SEQ-CRL@-10L0214 (51)	admin	Analyst	S_V-GROOVE 14	QC

Type	Date/Time	Message	User Name	Application	Sequence Name	Description
	12/15/2010 3:06:35 PM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Success
	12/15/2010 3:08:46 PM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/15/2010 3:08:46 PM	Sequence Started	admin	Analyst	S_V-GROOVE 14	0 standards, 1 samples
	12/15/2010 3:09:08 PM	Running SEQ-SOILCRL@-10K0544 (	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 3:16:41 PM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Success
	12/15/2010 3:50:59 PM	Sequence Started	admin	Analyst	S_V-GROOVE 14	0 standards, 30 samples
	12/15/2010 3:50:59 PM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/15/2010 3:51:19 PM	Running 1025737-BLK1 (1)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 3:58:55 PM	Running 1025737-SRM1 (22)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 4:06:42 PM	Running 1025737-SRM2 (23)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 4:14:29 PM	Running SB21929-16 (2)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 4:22:54 PM	Running 1025737-DUP1 (3)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 4:31:18 PM	Running SB21929-17 (4)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 4:39:31 PM	Running 1025737-MS1 (5)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 4:47:54 PM	Running 1025737-MSD1 (6)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 4:56:18 PM	Running SEQ-CCV@-10L0362 (25)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 5:03:44 PM	Running SEQ-CCB (26)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 5:11:18 PM	Running 1025737-PS1 (7)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 5:19:29 PM	Running SB21929-18 (8)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 5:27:30 PM	Running SB21929-19 (9)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 5:35:55 PM	Running SB21929-20 (10)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 5:44:20 PM	Running SB21929-21 (11)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 5:52:38 PM	Running SB21929-28 (12)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 6:00:55 PM	Running SB21956-02 (13)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 6:08:57 PM	Running SEQ-CCV@-10L0362 (27)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 6:15:11 PM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Aborted by User
	12/15/2010 6:16:31 PM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/15/2010 6:16:32 PM	Sequence Started	admin	Analyst	S_V-GROOVE 14	3 standards, 82 samples
	12/15/2010 6:16:52 PM	Running SEQ-CCB (28)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 6:24:31 PM	Running SEQ-IFA@-10L0035 (56)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 6:32:26 PM	Running SEQ-IFB@-10L0036 (57)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 6:40:05 PM	Running RINSE (58)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 6:47:36 PM	Running SB21956-03 (14)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 6:55:54 PM	Running SB21956-04 (15)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 7:03:44 PM	Running SB21956-05 (16)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 7:11:59 PM	Running SB22236-01 (17)	admin	Analyst	S_V-GROOVE 14	Unk

Type	Date/Time	Message	User Name	Application	Sequence Name	Description
	12/15/2010 7:20:00 PM	Running SB22236-02 (18)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 7:28:01 PM	Running SB22236-04 (19)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 7:36:06 PM	Running SB22236-05 (20)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 7:44:08 PM	Running SB22236-06 (21)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 7:52:13 PM	Running SEQ-CCV@-10L0362 (29)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 7:59:34 PM	Running SEQ-CCB (30)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 8:07:09 PM	Running SEQ-CRL@-10L0214 (51)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 8:14:42 PM	Running SEQ-SOILCRL@-10K0544 (	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 8:22:14 PM	Running 1025820-BLK1 (61)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 8:29:48 PM	Running 1025820-BS1 (83)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 8:37:12 PM	Running 1025820-BSD1 (84)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 8:44:34 PM	Running SB22044-01 (62)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 8:52:20 PM	Running 1025820-DUP1 (63)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 9:00:05 PM	Running SB22044-02 (64)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 9:07:38 PM	Running SB22044-03 (65)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 9:15:11 PM	Running SB22044-04 (66)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 9:22:58 PM	Running SEQ-CCV@-10L0362 (41)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 9:30:27 PM	Running SEQ-CCB (42)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 9:38:06 PM	Running SB22055-01 (67)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 9:45:39 PM	Running SB22055-02 (68)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 9:53:12 PM	Running SB22121-01 (69)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 10:00:51 PM	Running SB22121-02 (70)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 10:08:30 PM	Running SB22121-03 (71)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 10:15:56 PM	Running 1025820-MS1 (72)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 10:23:25 PM	Running 1025820-MSD1 (73)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 10:30:53 PM	Running 1025820-PS1 (74)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 10:38:22 PM	Running SEQ-CCV@-10L0362 (43)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 10:45:51 PM	Running SEQ-CCB (44)	admin	Analyst	S_V-GROOVE 14	QC
	12/15/2010 10:53:31 PM	Running SB22121-04 (75)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 11:01:03 PM	Running SB22121-05 (76)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 11:08:48 PM	Running SB22135-01 (77)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 11:16:31 PM	Running SB22135-02 (78)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 11:24:17 PM	Running SB22135-03 (79)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 11:31:51 PM	Running SB22135-04 (80)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 11:40:02 PM	Running SB22135-05 (81)	admin	Analyst	S_V-GROOVE 14	Unk
	12/15/2010 11:47:35 PM	Running SB22135-06 (82)	admin	Analyst	S_V-GROOVE 14	Unk

Type	Date/Time	Message	User Name	Application	Sequence Name	Description
	12/15/2010 11:55:34 PM	Running SEQ-CCV@-10L0362 (45)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 12:02:56 AM	Running SEQ-CCB (46)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 12:10:29 AM	Running SEQ-CRL@-10L0214 (52)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 12:18:00 AM	Running SEQ-SOILCRL@-10K0544 (	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 12:25:29 AM	Running 1025733-BLK1 (86)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 12:33:00 AM	Running 1025733-SRM1 (111)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 12:40:48 AM	Running 1025733-SRM2 (112)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 12:48:36 AM	Running SB21908-22 (87)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 12:56:27 AM	Running 1025733-DUP1 (88)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 1:04:17 AM	Running SB21908-23 (89)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 1:12:08 AM	Running SB21908-29 (90)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 1:20:12 AM	Running 1025733-MS1 (91)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 1:28:41 AM	Running 1025733-MSD1 (92)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 1:37:11 AM	Running SEQ-CCV@-10L0362 (47)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 1:44:40 AM	Running SEQ-CCB (48)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 1:52:22 AM	Running 1025733-PS1 (93)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 2:00:38 AM	Running SB21908-30 (94)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 2:08:54 AM	Running SB21908-31 (95)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 2:16:57 AM	Running SB21908-32 (96)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 2:24:47 AM	Running SB21908-33 (97)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 2:32:38 AM	Running SB21908-34 (98)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 2:41:05 AM	Running SB21908-35 (99)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 2:49:08 AM	Running SB21908-36 (100)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 2:56:59 AM	Running SB21908-37 (101)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 3:04:51 AM	Running SEQ-CCV@-10L0362 (49)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 3:12:13 AM	Running SEQ-CCB (50)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 3:19:46 AM	Running SB21908-38 (102)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 3:27:37 AM	Running SB21929-02 (103)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 3:36:03 AM	Running SB21929-03 (104)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 3:44:19 AM	Running SB21929-04 (105)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 3:52:10 AM	Running SB21929-05 (106)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 4:00:14 AM	Running SB21929-06 (107)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 4:08:40 AM	Running SB21929-07 (108)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 4:17:07 AM	Running SB21929-14 (109)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 4:25:33 AM	Running SB21929-15 (110)	admin	Analyst	S_V-GROOVE 14	Unk
	12/16/2010 4:33:23 AM	Running SEQ-CCV@-10L0362 (116)	admin	Analyst	S_V-GROOVE 14	QC

Type	Date/Time	Message	User Name	Application	Sequence Name	Description
	12/16/2010 4:40:46 AM	Running SEQ-CCB (117)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 4:48:17 AM	Running SEQ-SOILCRL@-10K0544 (	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 4:55:47 AM	Running SEQ-IFA@-10L0035 (4)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 5:03:27 AM	Running SEQ-IFB@-10L0036 (5)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 5:11:05 AM	Running SEQ-CCB (2)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 5:18:32 AM	Plasma off	admin	TEVA Control Center		
	12/16/2010 5:19:13 AM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Success
	12/16/2010 7:35:33 AM	Plasma On	admin	TEVA Control Center		
	12/16/2010 7:35:37 AM	Plasma ignition successful	admin	Analyst		
	12/16/2010 8:43:04 AM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/16/2010 8:43:04 AM	Sequence Started	admin	Analyst	S_V-GROOVE 14	9 standards, 0 samples
	12/16/2010 8:43:27 AM	Running Blank (1)	admin	Analyst	S_V-GROOVE 14	Cal
	12/16/2010 8:50:04 AM	Running SEQ-10L0214@CRL (2)	admin	Analyst	S_V-GROOVE 14	Cal
	12/16/2010 8:56:40 AM	Running SEQ-10L0099@4 (3)	admin	Analyst	S_V-GROOVE 14	Cal
	12/16/2010 9:03:08 AM	Running SEQ-10L0098@5 (4)	admin	Analyst	S_V-GROOVE 14	Cal
	12/16/2010 9:09:36 AM	Running SEQ-10L0097@5.5 (5)	admin	Analyst	S_V-GROOVE 14	Cal
	12/16/2010 9:16:07 AM	Running SEQ-10K0991@6 (6)	admin	Analyst	S_V-GROOVE 14	Cal
	12/16/2010 9:23:04 AM	Running SEQ-10L0152@7 (7)	admin	Analyst	S_V-GROOVE 14	Cal
	12/16/2010 9:30:18 AM	Running SEQ-10L0215@8 (8)	admin	Analyst	S_V-GROOVE 14	Cal
	12/16/2010 9:37:23 AM	Running SEQ-10L0216@9 (9)	admin	Analyst	S_V-GROOVE 14	Cal
	12/16/2010 9:41:37 AM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Aborted by User
	12/16/2010 9:56:52 AM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/16/2010 9:56:53 AM	Sequence Started	admin	Analyst	S_V-GROOVE 14	8 standards, 0 samples
	12/16/2010 9:57:15 AM	Running SEQ-ICV@-10L0275 (6)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 10:04:46 AM	Running SEQ-ICB (7)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 10:12:18 AM	Running SEQ-CRL@-10L0214 (3)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 10:19:50 AM	Running SEQ-SOILCRL@-10K0544 (	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 10:27:20 AM	Running SEQ-IFA@-10L0456 (4)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 10:35:01 AM	Running SEQ-IFB@-10L0457 (5)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 10:42:51 AM	Running SEQ-CCV@-10L0362 (1)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 10:49:32 AM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Aborted by User
	12/16/2010 11:15:09 AM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin
	12/16/2010 11:15:09 AM	Sequence Started	admin	Analyst	S_V-GROOVE 14	1 standards, 0 samples
	12/16/2010 11:15:30 AM	Running SEQ-CCB (2)	admin	Analyst	S_V-GROOVE 14	QC
	12/16/2010 11:23:09 AM	Autosampler Run Completed	admin	Analyst	S_V-GROOVE 14	Success
	12/16/2010 12:25:30 PM	Autosampler Run Started	admin	Analyst		'Untitled' - by admin

Last Page of data Report

APPENDIX E
DATA USABILITY SUMMARY REPORT

Environmental Resources Management

5788 Widewaters Parkway
Dewitt, NY 13214
(315) 445-2554
(315) 445-2543 (fax)

http://www.erm.com

DATA USABILITY SUMMARY REPORT (DUSR)
MANHATTAN BEER DISTRIBUTORS/FORMER BANKNOTE FACILITY
SUFFERN, NEW YORK
GROUND WATER SAMPLE ANALYSIS
ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)
PROJECT NUMBER 0125992
SPECTRUM ANALYTICAL, INC. JOB NUMBER SB21844

Deliverables:

The above referenced data package for four (4) ground water samples and one (1) blind field duplicate sample contains all required deliverables as stipulated under the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP) for Category B deliverables. The sample specific analysis included Chromium analyzed by United States Environmental Protection Agency (USEPA) SW-846 Method 6010C in accordance with "*40 CFR 136, Category A and B Parameters in Water and Wastewater*".

The data have been evaluated according to the protocols and quality control (QC) requirements of the ASP; the National Functional Guidelines for Inorganic Data Review (October 2004); the USEPA Region II Data Review SOP Number HW-2, Revision 13, September 2006: Evaluation of Metals Data for the CLP Program; and the reviewer's professional judgment.

This validation report pertains to the following ground water samples collected on 30 November 2010:

Samples	*QC Samples*
MW-4 (12/10)	Dup (12/10) - blind field duplicate of sample MW-4 (12/10)
MW-5 (12/10)	
MW-6 (12/10)	
MW-8 (12/10)	

Chain-of-Custody

- The Chain-of-Custody (COC) was reviewed for completeness and accuracy. There were no discrepancies observed with the samples presented on the COC, and all tests specified on the COC were performed for the designated samples.

Inorganics

The following items/criteria were reviewed:

- Case narrative and deliverable requirements
- Holding times and sample preservation
- Detection and reporting limits
- Inorganic analysis data sheets (Form I)
- Initial and continuing calibration verifications
- Lab Blank data
- ICP Interference Check Sample (ICS) analysis
- Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) results
- Contract Required Detection Limit (CRDL) Standard
- Serial Dilution results
- Blind Field Duplicate analysis

The items listed above were technically and contractually in compliance with SW-846 protocols with the exceptions discussed in the text below. The data have been validated according to the procedures outlined above and qualified accordingly.

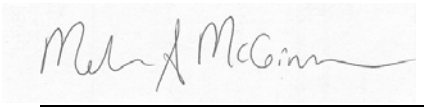
Metals

- Typically a matrix duplicate (MD) and a matrix spike/matrix spike duplicate (MS/MSD) set are collected and submitted to the laboratory per twenty field samples collected. In this case, no MD or MS/MSD were collected or submitted to the laboratory, and the laboratory did not run an MD or MS/MSD on any of the samples. The LCS and LCSD were within the quality control limits for Chromium. No qualification of the sample data is required.

- The CRDL standard recovery was outside of the 70-130% QC limit for Chromium in lab sample S011625-CRL2 (139%), indicating a potential high bias in positive sample results for associated samples at concentrations near the CRDL. Positive concentrations for Chromium are considered estimated and flagged "J" for samples with concentrations less than or equal to two times the CRDL. The CRDL for Chromium is 0.01 mg/L; therefore, samples with positive Chromium concentrations less than or equal to 0.02 mg/L have been flagged "J".

Package Summary:

All data are valid and usable with qualifications as noted in this review.

Signed:  Dated: 3 January 2011

Melissa A. McGinnis
Project Scientist

FORM I - INORGANIC ANALYSIS DATA SHEET
SW846 6010C

Dup (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-01	File ID:	20101215-035
Sampled:	11/30/10 10:00	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 13:43
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	1.49	1		SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET
SW846 6010C

MW-6 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-02	File ID:	20101215-036
Sampled:	11/30/10 10:45	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 13:50
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	0.0181 J	1		SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET
SW846 6010C

MW-8 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-03	File ID:	20101215-037
Sampled:	11/30/10 13:45	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 13:58
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	0.0410	1		SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET
SW846 6010C

MW-5 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-04	File ID:	20101215-038
Sampled:	11/30/10 11:35	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 14:06
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	0.0034	1	U	SW846 6010C

FORM I - INORGANIC ANALYSIS DATA SHEET
SW846 6010C

MW-4 (12/10)

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	21844
Client:	Environmental Resources Management - Dewitt, N			Project:	Former Banknote Facility-Suffern, NY
Project Number:	[none]			Received:	12/01/10 10:30
Matrix:	Ground Water	Laboratory ID:	SB21844-05	File ID:	20101215-039
Sampled:	11/30/10 12:45	Prepared:	12/11/10 10:00	Analyzed:	12/15/10 14:13
% Solids:	0.00	Preparation:	SW846 3005A	Initial/Final:	50 ml / 25 ml
Batch:	1025694	Sequence:	S011625	Calibration:	UNASSIGNED
Instrument:	Iris 3				

CAS NO.	Analyte	Concentration (mg/l)	Dilution Factor	Q	Method
7440-47-3	Chromium	1.50	1		SW846 6010C

Enclosure 1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. C344047

Site Name Former Banknote Corporation of America

Site Address: 10 Dunnigan Drive Zip Code: 10901
City/Town: Suffern
County: Rockland
Allowable Use(s) (if applicable, does not address local zoning): Commercial and Industrial
Site Acreage: 5.6
Owner: Mike McCarthy
Manhattan Beer Distributors, 400 Walnut Avenue, Bronx, NY 10454

Reporting Period: August 29, 2008 to July 27, 2010

Verification of Site Details **Box 2**

	YES	NO
1. Is the information in Box 1 correct?	☒	☐
If NO, are changes handwritten above or included on a separate sheet?	☐	
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☒	☐
If YES, is documentation or evidence that documentation has been previously submitted included with this certification? See referenced reports in the introduction (section 1) of Attached Report	☐	
3. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If YES, is documentation (or evidence that documentation has been previously submitted) included with this certification?	☐	
4. If use of the site is restricted, is the current use of the site consistent with those restrictions?	☒	☐
If NO, is an explanation included with this certification?	☐	
5. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☒
If YES, is the new information or evidence that new information has been previously submitted included with this Certification?	☐	
6. For non-significant-threat Brownfield Cleanup Program Sites subject to ECL 27-1415.7(c), are the assumptions in the Qualitative Exposure Assessment still valid (must be certified every five years)?	☒	☐
If NO, are changes in the assessment included with this certification?	☐	

SITE NO. C344047 Box 3

Description of Institutional Controls

Parcel	Institutional Control
S_B_L Image: 55.7-1-11	Ground Water Use Restriction Landuse Restriction

Box 4

Description of Engineering Controls

None Required

Attach documentation if IC/ECs cannot be certified or why IC/ECs are no longer applicable. (See instructions)

Control Description for Site No. C344047

Parcel: 55.7-1-11

A. Land Use is restricted to commercial or industrial uses.

Controls.

i. The Owner of the Property shall prohibit the use of groundwater underlying the Property, without treatment rendering it safe, for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the NYSDEC, or any successor agency of the NYSDEC.

ii. The groundwater monitoring wells installed on the Controlled Property as part of the Site Management Plan ("SMP") approved for the Controlled Property by the NYSDEC shall not be removed or rendered ineffective by Grantor, Grantor's assigns, or any lessees and persons using the Controlled Property without the express written approval of the NYSDEC, shall remain accessible at all times, and shall be inspected and tested in accordance with the SMP approved for the Controlled Property by the NYSDEC and any NYSDEC approved adjustments to the SMP.

iii. Grantor shall provide all persons who aquire an interest in the Controlled Property a true and complete copy of the SMP approved for the Controlled Property by the NYSDEC and all NYSDEC-approved amendments of the SMP.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

3. If this site has an Operation and Maintenance (O&M) Plan (or equivalent as required in the Decision Document);

   I certify by checking "YES" below that the O&M Plan Requirements (or equivalent as required in the Decision Document) are being met.

YES	NO
☒	☐

4. If this site has a Monitoring Plan (or equivalent as required in the remedy selection document);

   I certify by checking "YES" below that the requirements of the Monitoring Plan (or equivalent as required in the Decision Document) is being met.

YES	NO
☒	☐

IC CERTIFICATIONS
SITE NO. C344047

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 2 and/or 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

MAIN CORP OFFICES

I MIKE McCARTHY (print name) at 400 WALNUT AVE, BRONX, N.Y. 10454 (print business address)

am certifying as S.V.P OF OPERATIONS (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner or Remedial Party Rendering Certification — Date: 1/10/11

IC/EC CERTIFICATIONS

Box 7

QUALIFIED ENVIRONMENTAL PROFESSIONAL (QEP) SIGNATURE

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I David W. Myers (print name) at ERM - 5788 Widewaters Parkway (print business address) DeWitt, N.Y. 13214

am certifying as a Qualified Environmental Professional for the Owner

(Owner or Remedial Party) for the Site named in the Site Details Section of this form.

David W. Myers
Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp (if Required)

Date: 1/10/11

Enclosure 2

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the six questions in the Verification of Site Details Section. Questions 5 and 6 only refer to sites in the Brownfield Cleanup Program. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional / Engineering Controls (Boxes 3, 4, and 5)

1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party is to petition the Department requesting approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control and/or certify the other SM Plan components that are applicable, continue to complete the remainder of this **Certification** form. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a statement of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

   If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) is to be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page. Where the only control is an Institutional Control on the use of the property the certification statement in Box 6 shall be completed and may be made by the property owner. Where the site has Institutional and Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional (see table below).

Table 1. Signature Requirements for Control Certification Page

Type of Control	Example of IC/EC	Required Signatures
EC which does not include a treatment system or engineered caps.	Fence, Clean Soil Cover, Individual House Water Treatment System, Vapor Mitigation System	A site or property owner or remedial party, and a QEP. (P.E. license not required)
EC that includes treatment system or an engineered cap.	Pump & Treat System providing hydraulic control of a plume, Part 360 Cap.	A site or property owner or remedial party, and a QEP with a P.E. license.

WHERE to mail the signed Certification Form and electronic copy by **Wednesday, December 1, 2010**:

New York State Department of Environmental Conservation

625 Broadway, BURC
Albany, NY 12233

Attn: Randy Whitcher, Project Manager

Please note that extra postage may be required.