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# Level IV Data Package

MWH Group 229554

**Method: EPA 200.7**

2802050696

2802050697

EPA 200.7/6010B QC Check List

Analyst CSK Analysis Date 2-6-08 Reviewer/Date 2-7-08  
9 Feb 08

Instrument PerKin Elmer Optima 4300DV

- All sample analyzed within 6 month holding time
- All sample raw concentration below the high standard or linear range or marked for dilution and rerun

Initial and closing QC

- ICV within +/- 5%
- Linearity check +/- 10%
- ICSAB +/- 20%
- QCS +/- 5%
- MRL +/- 50%

Middle, closing and batch QC

- FilterCheck < 1/2 MRL
- MBLANK < 1/2 MRL
- LCS +/-15%
- MS/MSD +/-30%(200.7) +/- 25% (6010B)
- CCV/MCV/ECV +/- 10%
- ICB/CCB/ECB < 1/2 MRL
- CCB ran after the CCV

General QC

- RPD between MS/MSD is within +/-20%
- RPD between LCS/LCSD is within +/- 20%
- Internal standards 60 TO 125%
- All pH of the samples are < 2

- No more than 20 samples per batch
- NA MS is run at frequency of 1 every 10 samples and MSD is run at frequency of 1 every 20 samples
- NA QIR needed for failed QC
- NA Special Det Code noted on the cover sheet
- NA R value for multi point calibration is > 0.995
- NA Proper MRL check ran for special low MRL samples

Reagent and Standards used for  
Optima 4300 DV  
Updated 01/11/08

Int: CSK  
Date: 2-7-08

Method 200.7/6010

# ICP SUMMARY SHEET

File ID: 080206A  
 Date Started: 2/6/08  
 Analyst ID: CSK

## SAMPLE ID

LINEARITY	(18:32)	Wash	(18:43)	FILTERCHECK	(19:16)
2802050531	(19:28)	2802050546	(19:39)	2802050557	(19:55)
2801300083	(19:59)	2802050265	(20:03)	2802010008	(20:08)
2802050250	(20:12)	2802050251	(20:16)	2802050757	(20:21)
2801300506	(20:25)	2801300508	(20:30)	2801300509	(20:56)
2801300512_2	(21:00)	2801300515	(21:04)	2801300516	(21:09)
2802050238	(21:12)	2802050246	(21:16)	2802050247	(21:21)
2802050266	(21:25)	2802050267	(21:29)	2802050292	(21:58)
2802050293	(22:08)	2802050294	(22:12)	2802050295	(22:16)
2802050298	(22:36)	2802050560	(22:40)	2802050619	(22:44)
2802050658	(22:48)	2802050386	(22:52)	2802050697_2	(22:56)
2802040069	(23:29)	2802050753	(23:39)	2802040328	(23:43)
2802040329	(23:48)	2802040272	(23:52)	2802050634_5	(23:56)
2802040635_5	(23:59)	2802040636_5	(0:18)	2802040058	(0:22)
2712110780	(0:26)				

COMMENT:

CCB in "B" Failed

Rerun all the samples require "B" in 080207A

LCS 2007 & LCSD 2007 "K" Failed Rerun in 080207A

plus 2802040069 & 2802050753 which need to report "K"

Analyst:

CSK

2-7-08

Approved By:

m 9 Feb 08

Peer Reviewed! BKR 2/8/08

BATCH NUMBER for 080206A

Test Parameter:

SCA YR AL B\_ BA BE CA CD CO CR CU FE K MG MN MO NA NI PB V Z

Batch ID: 2802050531

2802050531	2802050546	2802050557
2801300083	2802050265	2802010008
2802050250	2802050251	2802050757
2801300506	2801300508	2801300509
2801300512_2X	2801300515	2801300516
2802050238	2802050246	2802050247
2802050266	2802050267	

Batch ID: 2802050292

2802050292	2802050293	2802050294
2802050295	2802050298	2802050560
2802050619	2802050658	2802050386
2802050697_2X		

Batch ID: 2802040069

2802040069	2802050753	2802040328
2802040329	2802040272	2802050634_5X
2802040635_5X	2802040636_5X	2802040058
2712110780		

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
ICV	2/6/08	18:29	1	9.9377	9.94	95-105	99.3%
LINEARITY	2/6/08	18:32	1	0.0022	.0022		
ICSA	2/6/08	18:36	1	0.0003	0.0003	80-120	
ICSAB	2/6/08	18:40	1	.24989	.25	80-120	99.9%
Wash	2/6/08	18:43	1	0.0001	0.0000		
QC-25 1ppm	2/6/08	18:47	1	1.0248	1.0		
CCV	2/6/08	18:51	1	5.2127	5.21	90-110	104%
ICB	2/6/08	19:01	1	0.0003	0.0002		
MRL	2/6/08	19:05	1	0.0106	.0106	50-150	105%
MRL/2	2/6/08	19:08	1	0.0052	.0052		
MRL/5	2/6/08	19:12	1	0.0022	.0022		
FILTERCHECK	2/6/08	19:16	1	0.0002	0.0001		
MBLANK	2/6/08	19:19	1	0.0002	0.0002		
LCS	2/6/08	19:23	1	1.0228	1.02	85-115	102%
LCSD	2/6/08	19:26	1	1.0171	1.02	85-115	101%
2802050531	2/6/08	19:28	1	0.0032	.0032		
2802050531MS	2/6/08	19:33	1	.98507	.985	[ 0.982]	98.1%
2802050531MSD	2/6/08	19:36	1	.98289	.983	[ 0.980]	97.9%
2802050531T	2/6/08	19:36	1		1.00	70 - 130	
2802050546	2/6/08	19:39	1	0.0027	.0027		
CCV	2/6/08	19:43	1	5.2328	5.23	90-110	104%
CCB	2/6/08	19:51	1	0.0002	0.0001		
2802050557	2/6/08	19:55	1	0.0028	.0028		
2801300083	2/6/08	19:59	1	-0.0001	ND		
2802050265	2/6/08	20:03	1	0.0007	0.0006		
2802010008	2/6/08	20:08	1	-0.0001	ND		
2802050250	2/6/08	20:12	1	0.0001	0.0000		
2802050251	2/6/08	20:16	1	-0.0001	ND		
2802050757	2/6/08	20:21	1	0.0016	.0016		
2801300506	2/6/08	20:25	1	-0.0005	ND		
2801300508	2/6/08	20:30	1	-0.0005	ND		
2801300508MS	2/6/08	20:34	1	.97907	.979	[ 0.979]	97.9%
CCV	2/6/08	20:37	1	5.1582	5.16	90-110	103%
CCB	2/6/08	20:45	1	0.0002	0.0001		
MCV	2/6/08	20:49	1	2.5820	2.58	90-110	103%
2801300508MSD	2/6/08	20:52	1	.97411	.974	[ 0.974]	97.4%
2801300508T	2/6/08	20:52	1		1.00	70 - 130	
2801300509	2/6/08	20:56	1	-0.0004	ND		
2801300512_2X	2/6/08	21:00	2	0.0004	0.0004		
2801300515	2/6/08	21:04	1	-0.0006	ND		
2801300516	2/6/08	21:09	1	-0.0004	ND		
2802050238	2/6/08	21:12	1	-0.0004	ND		
2802050246	2/6/08	21:16	1	-0.0002	ND		
2802050247	2/6/08	21:21	1	-0.0004	ND		
2802050266	2/6/08	21:25	1	-0.0004	ND		
2802050267	2/6/08	21:29	1	-0.0004	ND		

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
CCV	2/6/08	21:33	1	5.1058	5.11	90-110	102%
CCB	2/6/08	21:41	1	0.0001	0.0001		
MBLANK	2/6/08	21:45	1	0.0001	0.0001		
MRL	2/6/08	21:48	1	0.0107	.0107	50-150	106%
LCS	2/6/08	21:52	1	1.0233	1.02	85-115	102%
LCSD	2/6/08	21:55	1	1.0066	1.01	85-115	100%
2802050292	2/6/08	21:58	1	-0.0001	ND		
2802050292MS	2/6/08	22:02	1	.99859	.999	[ 0.999]	99.8%
2802050292MSD	2/6/08	22:05	1	.98609	.986	[ 0.986]	98.6%
2802050292T	2/6/08	22:05	1		1.00	70 - 130	
2802050293	2/6/08	22:08	1	0.0000	0.0000		
2802050294	2/6/08	22:12	1	0.0060	.006		
2802050295	2/6/08	22:16	1	-0.0003	ND		
CCV	2/6/08	22:20	1	5.1489	5.15	90-110	102%
CCB	2/6/08	22:29	1	0.0001	0.0001		
MCV	2/6/08	22:32	1	2.5249	2.52	90-110	100%
2802050298	2/6/08	22:36	1	0.0006	0.0006		
2802050560	2/6/08	22:40	1	0.0006	0.0006		
2802050619	2/6/08	22:44	1	-0.0000	ND		
2802050658	2/6/08	22:48	1	-0.0004	ND		
2802050386	2/6/08	22:52	1	0.0066	.0066		
2802050697_2X	2/6/08	22:56	2	0.0414	.041		
MBLANK2007	2/6/08	23:00	1	0.0001	0.0001		
MRL	2/6/08	23:04	1	.01074	.0107	50-150	107%
MRL2007	2/6/08	23:08	1	0.0102	.0102		
LCS2007	2/6/08	23:11	1	.94649	.946	85-115	94.6%
CCV	2/6/08	23:14	1	5.1461	5.15	90-110	102%
CCB	2/6/08	23:22	1	0.0004	0.0004		
LCSD2007	2/6/08	23:25	1	.98148	.981	85-115	98.1%
2802040069	2/6/08	23:29	1	0.0001	0.0000		
2802040069MS	2/6/08	23:33	1	.96569	.966	[ 0.966]	96.5%
2802040069MSD	2/6/08	23:36	1	.96685	.967	[ 0.967]	96.6%
2802040069T	2/6/08	23:36	1		1.00	70 - 130	
2802050753	2/6/08	23:39	1	0.0010	.001		
2802040328	2/6/08	23:43	1	0.0017	.0017		
2802040329	2/6/08	23:48	1	0.0007	0.0007		
2802040272	2/6/08	23:52	1	0.0115	.012		
2802050634_5X	2/6/08	23:56	5	0.0000	0.0000		
2802040635_5X	2/6/08	23:59	5	0.0005	0.0004		
CCV	2/7/08	0:03	1	5.1313	5.13	90-110	102%
CCB	2/7/08	0:11	1	0.0001	0.0001		
MCV	2/7/08	0:15	1	2.5210	2.52	90-110	100%
2802040636_5X	2/7/08	0:18	5	0.0004	0.0003		
2802040058	2/7/08	0:22	1	0.0002	0.0001		
2712110780	2/7/08	0:26	1	0.0370	.037		
ECV	2/7/08	0:29	1	5.0507	5.05	90-110	101%
ECB	2/7/08	0:38	1	0.0002	0.0002		

=====  
**Analysis Begun**

Start Time: 2/6/2008 18:22:21                      Plasma On Time: 2/6/2008 07:11:38  
 Logged In Analyst: Charley Kay                      Technique: ICP Continuous  
 Spectrometer Model: Optima 4300 DV, S/N 077N2121801 Autosampler Model: AS-93plus

Sample Information File: C:\pe\Charley Kay\Sample Information\080206A.sif  
 Batch ID: 080206A  
 Results Data Set: 080206A  
 Results Library: C:\pe\Charley Kay\Results\Results.mdb

=====  
**Method Loaded**

Method Name: 200.7&6010\_070703                      Method Last Saved: 2/5/2008 07:11:20  
 IEC File: 070703.iec                                  MSF File:  
 Method Description: 200.7/6010\_070703

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Al	Lin, Calc Int	Peak Area	Radial	Yr	Yes
As	Lin, Calc Int	Peak Area	Axial	Sca	Yes
B	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Ba	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Be	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Ca	Lin, Calc Int	Peak Area	Radial	Yr	Yes
Cd	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Co	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Cr	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Cu	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Fe	Lin, Calc Int	Peak Area	Radial	Yr	Yes
K	Lin, Calc Int	Peak Area	Radial	Yr	Yes
Mg	Lin, Calc Int	Peak Area	Radial	Yr	Yes
Mn	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Mo	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Na	Lin, Calc Int	Peak Area	Radial	Yr	Yes
Ni	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Pb	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Sb	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Se	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Tl	Lin, Calc Int	Peak Area	Axial	Sca	Yes
V	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Zn	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Sca	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Yr	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Alx	Lin, Calc Int	Peak Area	Axial	Sca	No
Bex	Lin, Calc Int	Peak Area	Axial	Sca	No

=====  
**Sequence No.: 1**

Sample ID: Calib Blank 1                              Autosampler Location: 0  
 Date Collected: 2/6/2008 18:22:46  
 Analyst:    Data Type: Original  
 Initial Sample Wt:                                      Initial Sample Vol:  
 Dilution:    Sample Prep Vol:

=====  
**Mean Data: Calib Blank 1**

Analyte	Mean Corrected		RSD		Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units	
Sca	469037.8	5080.20	1.08%	100	%	
Yr	285498.6	6512.12	2.28%	100	%	
Ag†	439.7	103.97	23.65%	{0.00}	mg/L	
Al†	48.4	1.57	3.25%	{0.00}	mg/L	
As†	6.0	0.80	13.32%	{0.00}	mg/L	
B †	78.4	7.58	9.67%	{0.00}	mg/L	
Ba†	-27.1	3.62	13.34%	{0.00}	mg/L	
Be†	-4149.4	27.70	0.67%	{0.00}	mg/L	
Ca†	679.8	7.53	1.11%	{0.00}	mg/L	
Cd†	60.5	2.27	3.75%	{0.00}	mg/L	
Co†	-52.1	0.37	0.70%	{0.00}	mg/L	
Cr†	240.3	6.78	2.82%	{0.00}	mg/L	



Cuf	2749.4	22.45	0.82%	[0.00] mg/L
Fef	-8.0	0.23	2.90%	[0.00] mg/L
Kf	297.9	12.82	4.30%	[0.00] mg/L
Mgt	-46.4	4.35	9.37%	[0.00] mg/L
Mnt	823.5	4.09	0.50%	[0.00] mg/L
Mot	21.9	2.08	9.48%	[0.00] mg/L
Nat	-23.4	8.35	35.65%	[0.00] mg/L
Nit	-26.6	2.85	10.69%	[0.00] mg/L
Pbt	-20.1	0.58	2.91%	[0.00] mg/L
Sbt	0.4	5.53	>999.9%	[0.00] mg/L
Set	3.5	2.72	77.31%	[0.00] mg/L
Tlt	-29.7	4.31	14.52%	[0.00] mg/L
Vt	144.3	10.01	6.94%	[0.00] mg/L
Znt	152.3	0.01	0.00%	[0.00] mg/L
Alxt	228.9	32.95	14.40%	[0.00] ug/L
Bext	-4149.4	27.70	0.67%	[0.00] ug/L

Sequence No.: 2
Sample ID: Standard 2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 2/6/2008 18:26:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Standard 2

Table with 5 columns: Analyte, Mean Corrected Intensity, Std.Dev., RSD, and Calib Conc. Units. Lists various elements like Sca, Yr, Agt, etc. with their respective values.

Calibration Summary

Table with 7 columns: Analyte, Stds., Equation, Intercept, Slope, Curvature, Corr. Coef., and Reslope. Provides calibration parameters for each analyte.

Sequence No.: 3  
 Sample ID: ICV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 15  
 Date Collected: 2/6/2008 18:29:32  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	409437.5	87.3 %	0.42			0.48%
Yr	273367.4	95.8 %	0.60			0.63%
Al†	47173.1	9.94 mg/L	0.125	9.94 mg/L	0.125	1.25%
	QC value within limits for Al Recovery = 99.35%					
B_†	157369.9	4.99 mg/L	0.036	4.99 mg/L	0.036	0.73%
	QC value within limits for B_ Recovery = 99.85%					
Ba†	754049.8	9.99 mg/L	0.060	9.99 mg/L	0.060	0.60%
	QC value within limits for Ba Recovery = 99.87%					
Be†	12940315.8	3.99 mg/L	0.042	3.99 mg/L	0.042	1.06%
	QC value within limits for Be Recovery = 99.70%					
Ca†	742303.9	99.5 mg/L	0.20	99.5 mg/L	0.20	0.20%
	QC value within limits for Ca Recovery = 99.53%					
Cd†	134538.2	5.02 mg/L	0.048	5.02 mg/L	0.048	0.95%
	QC value within limits for Cd Recovery = 100.34%					
Co†	253853.8	9.99 mg/L	0.098	9.99 mg/L	0.098	0.98%
	QC value within limits for Co Recovery = 99.90%					
Cr†	785563.0	9.94 mg/L	0.032	9.94 mg/L	0.032	0.32%
	QC value within limits for Cr Recovery = 99.38%					
Cu†	4451279.7	9.94 mg/L	0.041	9.94 mg/L	0.041	0.41%
	QC value within limits for Cu Recovery = 99.36%					
Fe†	9202.3	9.92 mg/L	0.106	9.92 mg/L	0.106	1.07%
	QC value within limits for Fe Recovery = 99.19%					
K†	135734.9	99.5 mg/L	0.39	99.5 mg/L	0.39	0.39%
	QC value within limits for K Recovery = 99.47%					
Mg†	281566.4	99.3 mg/L	0.21	99.3 mg/L	0.21	0.21%
	QC value within limits for Mg Recovery = 99.30%					
Mn†	5801482.6	9.98 mg/L	0.057	9.98 mg/L	0.057	0.57%
	QC value within limits for Mn Recovery = 99.81%					
Mo†	128930.1	9.97 mg/L	0.075	9.97 mg/L	0.075	0.75%
	QC value within limits for Mo Recovery = 99.74%					
Na†	418701.4	99.3 mg/L	0.36	99.3 mg/L	0.36	0.36%
	QC value within limits for Na Recovery = 99.25%					
Ni†	221042.9	9.96 mg/L	0.090	9.96 mg/L	0.090	0.90%
	QC value within limits for Ni Recovery = 99.59%					
Pb†	48187.1	10.1 mg/L	0.07	10.1 mg/L	0.07	0.68%
	QC value within limits for Pb Recovery = 100.94%					
V†	1823024.5	10.0 mg/L	0.04	10.0 mg/L	0.04	0.38%
	QC value within limits for V Recovery = 100.12%					
Zn†	473377.6	9.97 mg/L	0.083	9.97 mg/L	0.083	0.83%
	QC value within limits for Zn Recovery = 99.72%					

All analyte(s) passed QC.

Sequence No.: 4  
Sample ID: LINEARITY  
Analyst:  
Initial Sample Wt:  
Dilution:

Autosampler Location: 9  
Date Collected: 2/6/2008 18:32:48  
Data Type: Original  
Initial Sample Vol:  
Sample Prep Vol:

Mean Data: LINEARITY

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	393769.0	84.0	%	0.78			0.93%
Yr	265504.7	93.0	%	0.13			0.14%
Alt	-47.6	-0.0100	mg/L	0.00024	-0.0100 mg/L	0.00024	2.41%
	QC value within limits for Al Recovery = Not calculated						
B_f	1222.2	0.0389	mg/L	0.00323	0.0389 mg/L	0.00323	8.29%
	QC value within limits for B_ Recovery = Not calculated						
Bar	117.6	0.00156	mg/L	0.000063	0.00156 mg/L	0.000063	4.07%
	QC value within limits for Ba Recovery = Not calculated						
Be†	-1317.9	-0.00041	mg/L	0.000014	-0.00041 mg/L	0.000014	3.38%
	QC value within limits for Be Recovery = Not calculated						
Ca†	2186538.5	293	mg/L	1.3	293 mg/L	1.3	0.43%
	QC value within limits for Ca Recovery = 97.72%						
Cd†	-28.1	-0.00103	mg/L	0.000130	-0.00103 mg/L	0.000130	12.59%
	QC value within limits for Cd Recovery = Not calculated						
Co†	58.4	0.00230	mg/L	0.000089	0.00230 mg/L	0.000089	3.87%
	QC value within limits for Co Recovery = Not calculated						
Cr†	171.3	0.00217	mg/L	0.000197	0.00217 mg/L	0.000197	9.12%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	-4094.1	-0.00913	mg/L	0.000191	-0.00913 mg/L	0.000191	2.09%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	91187.5	98.3	mg/L	0.59	98.3 mg/L	0.59	0.60%
	QC value within limits for Fe Recovery = 98.29%						
K†	417778.6	306	mg/L	1.7	306 mg/L	1.7	0.54%
	QC value within limits for K Recovery = 102.05%						
Mg†	533257.2	188	mg/L	0.3	188 mg/L	0.3	0.16%
	QC value within limits for Mg Recovery = Not calculated						
Mn†	2121.6	0.00365	mg/L	0.000174	0.00365 mg/L	0.000174	4.78%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	22.5	0.00174	mg/L	0.000060	0.00174 mg/L	0.000060	3.42%
	QC value within limits for Mo Recovery = Not calculated						
Na†	1262601.8	299	mg/L	1.5	299 mg/L	1.5	0.51%
	QC value within limits for Na Recovery = 99.76%						
Ni†	3.0	0.00013	mg/L	0.000045	0.00013 mg/L	0.000045	33.25%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	-9.4	-0.00197	mg/L	0.002248	-0.00197 mg/L	0.002248	113.88%
	QC value within limits for Pb Recovery = Not calculated						
V†	-1083.5	-0.00591	mg/L	0.000117	-0.00591 mg/L	0.000117	1.99%
	QC value within limits for V Recovery = Not calculated						
Zn†	1317.5	0.0279	mg/L	0.00022	0.0279 mg/L	0.00022	0.79%
	QC value within limits for Zn Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 5  
 Sample ID: ICSA  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 10  
 Date Collected: 2/6/2008 18:36:30  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	416340.3	88.8	%	0.81			0.92%
Yr	271519.6	95.1	%	0.02			0.02%
Al†	1160230.4	244	mg/L	0.8	244 mg/L	0.8	0.31%
	QC value within limits for Al Recovery = 97.74%						
B_†	774.8	0.0247	mg/L	0.00042	0.0247 mg/L	0.00042	1.71%
	QC value within limits for B_ Recovery = Not calculated						
Ba†	172.6	0.00229	mg/L	0.000084	0.00229 mg/L	0.000084	3.69%
	QC value within limits for Ba Recovery = Not calculated						
Be†	-1044.9	-0.00032	mg/L	0.000013	-0.00032 mg/L	0.000013	4.13%
	QC value within limits for Be Recovery = Not calculated						
Ca†	1859205.1	249	mg/L	0.4	249 mg/L	0.4	0.14%
	QC value within limits for Ca Recovery = 99.71%						
Cd†	-29.0	-0.00107	mg/L	0.000067	-0.00107 mg/L	0.000067	6.30%
	QC value within limits for Cd Recovery = Not calculated						
Co†	34.4	0.00135	mg/L	0.000084	0.00135 mg/L	0.000084	6.17%
	QC value within limits for Co Recovery = Not calculated						
Cr†	25.6	0.00032	mg/L	0.000043	0.00032 mg/L	0.000043	13.33%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	-4375.0	-0.00975	mg/L	0.000090	-0.00975 mg/L	0.000090	0.92%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	89405.0	96.4	mg/L	0.20	96.4 mg/L	0.20	0.21%
	QC value within limits for Fe Recovery = 96.37%						
K†	399.9	0.293	mg/L	0.0098	0.293 mg/L	0.0098	3.33%
	QC value within limits for K Recovery = Not calculated						
Mg†	663683.0	234	mg/L	0.1	234 mg/L	0.1	0.03%
	QC value within limits for Mg Recovery = 93.63%						
Mn†	2565.2	0.00441	mg/L	0.000071	0.00441 mg/L	0.000071	1.60%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	14.3	0.00111	mg/L	0.000289	0.00111 mg/L	0.000289	26.10%
	QC value within limits for Mo Recovery = Not calculated						
Na†	1015.0	0.241	mg/L	0.0065	0.241 mg/L	0.0065	2.71%
	QC value within limits for Na Recovery = Not calculated						
Ni†	-11.6	-0.00052	mg/L	0.000510	-0.00052 mg/L	0.000510	97.49%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	-147.4	-0.0309	mg/L	0.00012	-0.0309 mg/L	0.00012	0.40%
	QC value within limits for Pb Recovery = Not calculated						
V†	-1063.7	-0.00581	mg/L	0.000131	-0.00581 mg/L	0.000131	2.26%
	QC value within limits for V Recovery = Not calculated						
Zn†	967.7	0.0205	mg/L	0.00029	0.0205 mg/L	0.00029	1.41%
	QC value within limits for Zn Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 6  
 Sample ID: ICSAB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 11  
 Date Collected: 2/6/2008 18:40:13  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	404827.0	86.3 %		0.43			0.50%
Yr	263377.7	92.3 %		0.17			0.19%
Al†	1190447.3	251 mg/L		2.4	251 mg/L	2.4	0.97%
	QC value within limits for Al Recovery = 100.29%						
B_†	671.2	0.0209 mg/L		0.00038	0.0209 mg/L	0.00038	1.82%
	QC value within limits for B_ Recovery = Not calculated						
Ba†	19544.1	0.259 mg/L		0.0010	0.259 mg/L	0.0010	0.39%
	QC value within limits for Ba Recovery = 103.54%						
Be†	795520.3	0.245 mg/L		0.0005	0.245 mg/L	0.0005	0.19%
	QC value within limits for Be Recovery = 98.07%						
Ca†	1901731.1	255 mg/L		1.4	255 mg/L	1.4	0.54%
	QC value within limits for Ca Recovery = 101.99%						
Cd†	13104.7	0.486 mg/L		0.0021	0.486 mg/L	0.0021	0.44%
	QC value within limits for Cd Recovery = 97.17%						
Co†	6082.0	0.239 mg/L		0.0004	0.239 mg/L	0.0004	0.15%
	QC value within limits for Co Recovery = 95.74%						
Cr†	19753.5	0.250 mg/L		0.0007	0.250 mg/L	0.0007	0.27%
	QC value within limits for Cr Recovery = 99.96%						
Cu†	111191.2	0.248 mg/L		0.0002	0.248 mg/L	0.0002	0.07%
	QC value within limits for Cu Recovery = 99.27%						
Fe†	93238.0	101 mg/L		0.3	101 mg/L	0.3	0.32%
	QC value within limits for Fe Recovery = 100.50%						
K†	297.8	0.218 mg/L		0.0111	0.218 mg/L	0.0111	5.08%
	QC value within limits for K Recovery = Not calculated						
Mg†	681194.9	240 mg/L		1.9	240 mg/L	1.9	0.80%
	QC value within limits for Mg Recovery = 96.10%						
Mn†	151728.6	0.261 mg/L		0.0007	0.261 mg/L	0.0007	0.27%
	QC value within limits for Mn Recovery = 104.41%						
Mo†	10.3	0.00080 mg/L		0.000961	0.00080 mg/L	0.000961	120.75%
	QC value within limits for Mo Recovery = Not calculated						
Na†	931.5	0.221 mg/L		0.0103	0.221 mg/L	0.0103	4.64%
	QC value within limits for Na Recovery = Not calculated						
Ni†	10413.9	0.469 mg/L		0.0013	0.469 mg/L	0.0013	0.27%
	QC value within limits for Ni Recovery = 93.84%						
Pb†	2200.9	0.461 mg/L		0.0022	0.461 mg/L	0.0022	0.47%
	QC value within limits for Pb Recovery = 92.20%						
V†	44131.1	0.242 mg/L		0.0001	0.242 mg/L	0.0001	0.06%
	QC value within limits for V Recovery = 96.97%						
Zn†	25714.2	0.542 mg/L		0.0016	0.542 mg/L	0.0016	0.29%
	QC value within limits for Zn Recovery = 108.44%						

All analyte(s) passed QC.

Sequence No.: 7  
 Sample ID: Wash  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/6/2008 18:43:56  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: Wash

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	466028.3	99.4 %		0.17				0.17%
Yr	283061.8	99.1 %		0.51				0.52%
Al†	-17.4	-0.00367 mg/L		0.006548	-0.00367 mg/L		0.006548	178.52%
	QC value within limits for Al Recovery = Not calculated							
B_†	710.7	0.0226 mg/L		0.00010	0.0226 mg/L		0.00010	0.45%
	QC value within limits for B_ Recovery = Not calculated							
Ba†	3.6	0.00005 mg/L		0.000066	0.00005 mg/L		0.000066	139.77%
	QC value within limits for Ba Recovery = Not calculated							
Be†	70.6	0.00002 mg/L		0.000028	0.00002 mg/L		0.000028	127.36%
	QC value within limits for Be Recovery = Not calculated							
Ca†	7.5	0.00101 mg/L		0.000301	0.00101 mg/L		0.000301	29.86%
	QC value within limits for Ca Recovery = Not calculated							
Cd†	2.4	0.00009 mg/L		0.000070	0.00009 mg/L		0.000070	79.10%
	QC value within limits for Cd Recovery = Not calculated							
Co†	-3.0	-0.00012 mg/L		0.000232	-0.00012 mg/L		0.000232	198.74%
	QC value within limits for Co Recovery = Not calculated							
Cr†	5.5	0.00007 mg/L		0.000005	0.00007 mg/L		0.000005	7.34%
	QC value within limits for Cr Recovery = Not calculated							
Cu†	838.6	0.00187 mg/L		0.000069	0.00187 mg/L		0.000069	3.67%
	QC value within limits for Cu Recovery = Not calculated							
Fe†	8.8	0.00946 mg/L		0.001714	0.00946 mg/L		0.001714	18.11%
	QC value within limits for Fe Recovery = Not calculated							
K†	76.4	0.0560 mg/L		0.06556	0.0560 mg/L		0.06556	117.16%
	QC value within limits for K Recovery = Not calculated							
Mg†	4.6	0.00162 mg/L		0.000463	0.00162 mg/L		0.000463	28.59%
	QC value within limits for Mg Recovery = Not calculated							
Mn†	-201.7	-0.00035 mg/L		0.000026	-0.00035 mg/L		0.000026	7.41%
	QC value within limits for Mn Recovery = Not calculated							
Mo†	5.4	0.00042 mg/L		0.000316	0.00042 mg/L		0.000316	75.81%
	QC value within limits for Mo Recovery = Not calculated							
Na†	233.4	0.0553 mg/L		0.00574	0.0553 mg/L		0.00574	10.37%
	QC value within limits for Na Recovery = Not calculated							
Ni†	-3.8	-0.00017 mg/L		0.000414	-0.00017 mg/L		0.000414	244.23%
	QC value within limits for Ni Recovery = Not calculated							
Pb†	1.1	0.00023 mg/L		0.000424	0.00023 mg/L		0.000424	187.85%
	QC value within limits for Pb Recovery = Not calculated							
V†	3.8	0.00002 mg/L		0.000058	0.00002 mg/L		0.000058	273.00%
	QC value within limits for V Recovery = Not calculated							
Zn†	-12.2	-0.00026 mg/L		0.000069	-0.00026 mg/L		0.000069	26.83%
	QC value within limits for Zn Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 8  
 Sample ID: QC-25 lppm  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 12  
 Date Collected: 2/6/2008 18:47:19  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: QC-25 lppm

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	457833.0	97.6 %		0.32			0.33%
Yr	282951.8	99.1 %		0.81			0.81%
Alt	4733.0	0.997 mg/L		0.0115	0.997 mg/L	0.0115	1.16%
	QC value within limits for Al Recovery = 99.68%						
B_f	30580.4	0.972 mg/L		0.0006	0.972 mg/L	0.0006	0.06%
	QC value within limits for B_ Recovery = 97.19%						
Ba_f	79336.3	1.05 mg/L		0.000	1.05 mg/L	0.000	0.04%
	QC value within limits for Ba Recovery = 105.08%						
Be_f	3246415.7	1.00 mg/L		0.001	1.00 mg/L	0.001	0.08%
	QC value within limits for Be Recovery = 100.05%						
Ca_f	7744.2	1.04 mg/L		0.011	1.04 mg/L	0.011	1.06%
	QC value within limits for Ca Recovery = 103.83%						
Cd_f	26266.5	0.976 mg/L		0.0026	0.976 mg/L	0.0026	0.27%
	QC value within limits for Cd Recovery = 97.60%						
Co_f	26844.8	1.06 mg/L		0.000	1.06 mg/L	0.000	0.01%
	QC value within limits for Co Recovery = 105.64%						
Cr_f	81010.4	1.02 mg/L		0.000	1.02 mg/L	0.000	0.01%
	QC value within limits for Cr Recovery = 102.48%						
Cu_f	449790.6	1.00 mg/L		0.003	1.00 mg/L	0.003	0.25%
	QC value within limits for Cu Recovery = 100.40%						
Fe_f	965.0	1.04 mg/L		0.010	1.04 mg/L	0.010	0.97%
	QC value within limits for Fe Recovery = 104.02%						
K_f	13166.5	9.65 mg/L		0.142	9.65 mg/L	0.142	1.48%
	QC value within limits for K Recovery = 96.48%						
Mg_f	2993.6	1.06 mg/L		0.008	1.06 mg/L	0.008	0.77%
	QC value within limits for Mg Recovery = 105.58%						
Mn_f	617344.0	1.06 mg/L		0.000	1.06 mg/L	0.000	0.03%
	QC value within limits for Mn Recovery = 106.21%						
Mo_f	12621.8	0.976 mg/L		0.0039	0.976 mg/L	0.0039	0.40%
	QC value within limits for Mo Recovery = 97.64%						
Na_f	4249.8	1.01 mg/L		0.003	1.01 mg/L	0.003	0.29%
	QC value within limits for Na Recovery = 100.74%						
Ni_f	24031.9	1.08 mg/L		0.001	1.08 mg/L	0.001	0.11%
	QC value within limits for Ni Recovery = 108.28%						
Pb_f	5101.7	1.07 mg/L		0.005	1.07 mg/L	0.005	0.48%
	QC value within limits for Pb Recovery = 106.86%						
V_f	180104.9	0.989 mg/L		0.0005	0.989 mg/L	0.0005	0.05%
	QC value within limits for V Recovery = 98.94%						
Zn_f	50060.1	1.05 mg/L		0.000	1.05 mg/L	0.000	0.01%
	QC value within limits for Zn Recovery = 105.44%						

All analyte(s) passed QC.



Sequence No.: 9  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 2/6/2008 18:51:04  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	422753.1	90.1 %	0.55			0.61%
Yr	270056.2	94.6 %	0.01			0.01%
Al†	24379.2	5.13 mg/L	0.019	5.13 mg/L	0.019	0.38%
	QC value within limits for Al Recovery = 102.69%					
B_†	80127.9	2.54 mg/L	0.024	2.54 mg/L	0.024	0.95%
	QC value within limits for B_ Recovery = 101.67%					
Ba†	387337.2	5.13 mg/L	0.037	5.13 mg/L	0.037	0.71%
	QC value within limits for Ba Recovery = 102.60%					
Be†	6741962.3	2.08 mg/L	0.014	2.08 mg/L	0.014	0.66%
	QC value within limits for Be Recovery = 103.89%					
Ca†	385322.7	51.7 mg/L	0.01	51.7 mg/L	0.01	0.02%
	QC value within limits for Ca Recovery = 103.33%					
Cd†	54952.3	2.05 mg/L	0.010	2.05 mg/L	0.010	0.47%
	QC value within limits for Cd Recovery = 102.67%					
Co†	131452.7	5.17 mg/L	0.034	5.17 mg/L	0.034	0.66%
	QC value within limits for Co Recovery = 103.46%					
Cr†	412060.8	5.21 mg/L	0.042	5.21 mg/L	0.042	0.80%
	QC value within limits for Cr Recovery = 104.26%					
Cu†	2263845.5	5.05 mg/L	0.016	5.05 mg/L	0.016	0.31%
	QC value within limits for Cu Recovery = 101.07%					
Fe†	4837.2	5.21 mg/L	0.002	5.21 mg/L	0.002	0.05%
	QC value within limits for Fe Recovery = 104.28%					
K†	68204.5	50.0 mg/L	0.03	50.0 mg/L	0.03	0.07%
	QC value within limits for K Recovery = 99.96%					
Mg†	145607.9	51.4 mg/L	0.03	51.4 mg/L	0.03	0.05%
	QC value within limits for Mg Recovery = 102.70%					
Mn†	3028084.0	5.21 mg/L	0.006	5.21 mg/L	0.006	0.11%
	QC value within limits for Mn Recovery = 104.19%					
Mo†	65455.6	5.06 mg/L	0.052	5.06 mg/L	0.052	1.03%
	QC value within limits for Mo Recovery = 101.27%					
Na†	210726.6	50.0 mg/L	0.07	50.0 mg/L	0.07	0.14%
	QC value within limits for Na Recovery = 99.90%					
Ni†	116150.5	5.23 mg/L	0.033	5.23 mg/L	0.033	0.63%
	QC value within limits for Ni Recovery = 104.66%					
Pb†	25114.7	5.26 mg/L	0.009	5.26 mg/L	0.009	0.16%
	QC value within limits for Pb Recovery = 105.21%					
V†	929621.3	5.11 mg/L	0.005	5.11 mg/L	0.005	0.10%
	QC value within limits for V Recovery = 102.13%					
Zn†	248381.6	5.23 mg/L	0.036	5.23 mg/L	0.036	0.69%
	QC value within limits for Zn Recovery = 104.65%					

All analyte(s) passed QC.

Sequence No.: 10  
 Sample ID: ICB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/6/2008 18:54:17  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	457869.3	97.6 %		0.40			0.41%
Yr	285726.0	100 %		0.0			0.05%
Al†	-31.9	-0.00673 mg/L		0.004361	-0.00673 mg/L	0.004361	64.82%
	QC value within limits for Al Recovery = Not calculated						
B_†	1064.3	0.0339 mg/L		0.00067	0.0339 mg/L	0.00067	1.98%
	QC value greater than the upper limit for B_ Recovery = Not calculated						
Ba†	3.8	0.00005 mg/L		0.000070	0.00005 mg/L	0.000070	138.07%
	QC value within limits for Ba Recovery = Not calculated						
Be†	0.7	0.00000 mg/L		0.000019	0.00000 mg/L	0.000019	>999.9%
	QC value within limits for Be Recovery = Not calculated						
Ca†	-13.8	-0.00185 mg/L		0.000096	-0.00185 mg/L	0.000096	5.17%
	QC value within limits for Ca Recovery = Not calculated						
Cd†	3.7	0.00014 mg/L		0.000064	0.00014 mg/L	0.000064	47.04%
	QC value within limits for Cd Recovery = Not calculated						
Co†	-3.9	-0.00015 mg/L		0.000002	-0.00015 mg/L	0.000002	1.58%
	QC value within limits for Co Recovery = Not calculated						
Cr†	15.0	0.00019 mg/L		0.000056	0.00019 mg/L	0.000056	29.25%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	1018.2	0.00227 mg/L		0.000009	0.00227 mg/L	0.000009	0.41%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	4.1	0.00443 mg/L		0.004187	0.00443 mg/L	0.004187	94.42%
	QC value within limits for Fe Recovery = Not calculated						
K†	86.0	0.0630 mg/L		0.03206	0.0630 mg/L	0.03206	50.85%
	QC value within limits for K Recovery = Not calculated						
Mg†	1.1	0.00039 mg/L		0.000349	0.00039 mg/L	0.000349	90.56%
	QC value within limits for Mg Recovery = Not calculated						
Mn†	-102.4	-0.00018 mg/L		0.000012	-0.00018 mg/L	0.000012	6.84%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	17.8	0.00138 mg/L		0.000065	0.00138 mg/L	0.000065	4.69%
	QC value within limits for Mo Recovery = Not calculated						
Na†	75.7	0.0179 mg/L		0.01225	0.0179 mg/L	0.01225	68.27%
	QC value within limits for Na Recovery = Not calculated						
Ni†	-4.7	-0.00021 mg/L		0.000093	-0.00021 mg/L	0.000093	44.01%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	13.5	0.00282 mg/L		0.001258	0.00282 mg/L	0.001258	44.55%
	QC value within limits for Pb Recovery = Not calculated						
V†	15.0	0.00008 mg/L		0.000074	0.00008 mg/L	0.000074	88.74%
	QC value within limits for V Recovery = Not calculated						
Zn†	7.0	0.00015 mg/L		0.000074	0.00015 mg/L	0.000074	49.99%
	QC value within limits for Zn Recovery = Not calculated						
	QC Failed. Retry.						

Sequence No.: 11  
 Sample ID: ICB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/6/2008 18:56:50  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	455565.1	97.1 %		1.17			1.21%
Yr	281967.1	98.8 %		0.04			0.04%
Al†	-4.1	-0.00087 mg/L		0.001701	-0.00087 mg/L	0.001701	195.08%
	QC value within limits for Al Recovery = Not calculated						
B_†	887.6	0.0283 mg/L		0.00106	0.0283 mg/L	0.00106	3.77%
	QC value greater than the upper limit for B_ Recovery = Not calculated						
Ba†	1.6	0.00002 mg/L		0.000030	0.00002 mg/L	0.000030	141.30%

Ba	QC value within limits for Ba	Recovery = Not calculated				
Ba	-6.9	0.00000 mg/L	0.000034	0.00000 mg/L	0.000034	>999.9%
Be	QC value within limits for Be	Recovery = Not calculated				
Be	-16.7	-0.00223 mg/L	0.000138	-0.00223 mg/L	0.000138	6.19%
Ca	QC value within limits for Ca	Recovery = Not calculated				
Ca	1.9	0.00007 mg/L	0.000193	0.00007 mg/L	0.000193	270.08%
Cd	QC value within limits for Cd	Recovery = Not calculated				
Cd	4.8	0.00019 mg/L	0.000208	0.00019 mg/L	0.000208	110.83%
Co	QC value within limits for Co	Recovery = Not calculated				
Co	13.1	0.00017 mg/L	0.000013	0.00017 mg/L	0.000013	7.74%
Cr	QC value within limits for Cr	Recovery = Not calculated				
Cr	805.0	0.00180 mg/L	0.000134	0.00180 mg/L	0.000134	7.49%
Cu	QC value within limits for Cu	Recovery = Not calculated				
Cu	6.8	0.00730 mg/L	0.000596	0.00730 mg/L	0.000596	8.17%
Fe	QC value within limits for Fe	Recovery = Not calculated				
Fe	28.0	0.0205 mg/L	0.04243	0.0205 mg/L	0.04243	206.56%
K	QC value within limits for K	Recovery = Not calculated				
K	2.7	0.00095 mg/L	0.001108	0.00095 mg/L	0.001108	116.63%
Mg	QC value within limits for Mg	Recovery = Not calculated				
Mg	-166.9	-0.00029 mg/L	0.000048	-0.00029 mg/L	0.000048	16.75%
Mn	QC value within limits for Mn	Recovery = Not calculated				
Mn	9.9	0.00077 mg/L	0.000065	0.00077 mg/L	0.000065	8.43%
Mo	QC value within limits for Mo	Recovery = Not calculated				
Mo	58.4	0.0138 mg/L	0.00800	0.0138 mg/L	0.00800	57.75%
Na	QC value within limits for Na	Recovery = Not calculated				
Na	-5.5	-0.00025 mg/L	0.000060	-0.00025 mg/L	0.000060	24.01%
Ni	QC value within limits for Ni	Recovery = Not calculated				
Ni	-2.6	-0.00054 mg/L	0.000120	-0.00054 mg/L	0.000120	22.10%
Pb	QC value within limits for Pb	Recovery = Not calculated				
Pb	14.9	0.00008 mg/L	0.000078	0.00008 mg/L	0.000078	95.09%
V	QC value within limits for V	Recovery = Not calculated				
V	8.4	0.00018 mg/L	0.000050	0.00018 mg/L	0.000050	27.66%
Zn	QC value within limits for Zn	Recovery = Not calculated				
Zn						

QC Failed. Retry.

Sequence No.: 12

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 0

Date Collected: 2/6/2008 18:59:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	454444.4	96.9 %		0.06			0.06%
Yr	278345.4	97.5 %		0.21			0.21%
Al	7.2	0.00152 mg/L		0.003023	0.00152 mg/L	0.003023	198.89%
B	QC value within limits for Al	Recovery = Not calculated					
B	807.9	0.0257 mg/L		0.00033	0.0257 mg/L	0.00033	1.28%
B	QC value greater than the upper limit for B	Recovery = Not calculated					
Bar	0.4	0.00001 mg/L		0.000024	0.00001 mg/L	0.000024	453.02%
Ba	QC value within limits for Ba	Recovery = Not calculated					
Be	-78.6	-0.00002 mg/L		0.000030	-0.00002 mg/L	0.000030	125.16%
Be	QC value within limits for Be	Recovery = Not calculated					
Ca	-12.8	-0.00172 mg/L		0.001511	-0.00172 mg/L	0.001511	87.95%
Ca	QC value within limits for Ca	Recovery = Not calculated					
Cd	2.0	0.00007 mg/L		0.000090	0.00007 mg/L	0.000090	120.41%
Cd	QC value within limits for Cd	Recovery = Not calculated					
Co	-5.3	-0.00021 mg/L		0.000002	-0.00021 mg/L	0.000002	0.96%
Co	QC value within limits for Co	Recovery = Not calculated					
Cr	11.0	0.00014 mg/L		0.000023	0.00014 mg/L	0.000023	16.44%
Cr	QC value within limits for Cr	Recovery = Not calculated					
Cu	710.8	0.00158 mg/L		0.000027	0.00158 mg/L	0.000027	1.68%
Cu	QC value within limits for Cu	Recovery = Not calculated					
Fe	5.4	0.00580 mg/L		0.000237	0.00580 mg/L	0.000237	4.07%
Fe	QC value within limits for Fe	Recovery = Not calculated					
K	20.6	0.0151 mg/L		0.01241	0.0151 mg/L	0.01241	82.21%
K	QC value within limits for K	Recovery = Not calculated					
Mg	-0.2	-0.00007 mg/L		0.000705	-0.00007 mg/L	0.000705	989.78%
Mg	QC value within limits for Mg	Recovery = Not calculated					

Mnt	-118.4	-0.00020	mg/L	0.000009	-0.00020	mg/L	0.000009	4.35%
	QC value within limits for Mn Recovery = Not calculated							
Mot	8.3	0.00064	mg/L	0.000267	0.00064	mg/L	0.000267	41.57%
	QC value within limits for Mo Recovery = Not calculated							
Nat	82.1	0.0195	mg/L	0.00539	0.0195	mg/L	0.00539	27.70%
	QC value within limits for Na Recovery = Not calculated							
Nit	-3.5	-0.00016	mg/L	0.000303	-0.00016	mg/L	0.000303	193.71%
	QC value within limits for Ni Recovery = Not calculated							
Pbt	1.0	0.00020	mg/L	0.000412	0.00020	mg/L	0.000412	204.61%
	QC value within limits for Pb Recovery = Not calculated							
Vt	5.9	0.00003	mg/L	0.000038	0.00003	mg/L	0.000038	116.51%
	QC value within limits for V Recovery = Not calculated							
Znt	1.0	0.00002	mg/L	0.000080	0.00002	mg/L	0.000080	356.77%
	QC value within limits for Zn Recovery = Not calculated							

Sequence No.: 13  
 Sample ID: ICB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/6/2008 19:01:56  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Units	Calib. Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	449154.6	95.8	%	0.31				0.32%
Yr	281218.8	98.5	%	0.28				0.28%
Alt	7.5	0.00158	mg/L	0.001738	0.00158	mg/L	0.001738	109.94%
	QC value within limits for Al Recovery = Not calculated							
B_t	751.8	0.0239	mg/L	0.00023	0.0239	mg/L	0.00023	0.94%
	QC value greater than the upper limit for B Recovery = Not calculated							
Bat	-1.0	-0.00001	mg/L	0.000009	-0.00001	mg/L	0.000009	68.03%
	QC value within limits for Ba Recovery = Not calculated							
Bet	-90.6	-0.00003	mg/L	0.000006	-0.00003	mg/L	0.000006	22.48%
	QC value within limits for Be Recovery = Not calculated							
Cat	-8.8	-0.00118	mg/L	0.000237	-0.00118	mg/L	0.000237	20.00%
	QC value within limits for Ca Recovery = Not calculated							
Cdt	-0.6	-0.00002	mg/L	0.000042	-0.00002	mg/L	0.000042	194.26%
	QC value within limits for Cd Recovery = Not calculated							
Cot	-3.2	-0.00012	mg/L	0.000103	-0.00012	mg/L	0.000103	82.97%
	QC value within limits for Co Recovery = Not calculated							
Crt	20.7	0.00026	mg/L	0.000136	0.00026	mg/L	0.000136	51.85%
	QC value within limits for Cr Recovery = Not calculated							
Cut	679.7	0.00152	mg/L	0.000034	0.00152	mg/L	0.000034	2.25%
	QC value within limits for Cu Recovery = Not calculated							
Fet	4.6	0.00491	mg/L	0.002107	0.00491	mg/L	0.002107	42.91%
	QC value within limits for Fe Recovery = Not calculated							
Kt	47.1	0.0345	mg/L	0.01894	0.0345	mg/L	0.01894	54.83%
	QC value within limits for K Recovery = Not calculated							
Mgt	1.2	0.00043	mg/L	0.000674	0.00043	mg/L	0.000674	156.03%
	QC value within limits for Mg Recovery = Not calculated							
Mnt	-194.5	-0.00033	mg/L	0.000021	-0.00033	mg/L	0.000021	6.27%
	QC value within limits for Mn Recovery = Not calculated							
Mot	5.6	0.00043	mg/L	0.000638	0.00043	mg/L	0.000638	147.89%
	QC value within limits for Mo Recovery = Not calculated							
Nat	42.5	0.0101	mg/L	0.00191	0.0101	mg/L	0.00191	18.94%
	QC value within limits for Na Recovery = Not calculated							
Nit	-6.0	-0.00027	mg/L	0.000423	-0.00027	mg/L	0.000423	155.46%
	QC value within limits for Ni Recovery = Not calculated							
Pbt	-0.9	-0.00018	mg/L	0.000958	-0.00018	mg/L	0.000958	526.93%
	QC value within limits for Pb Recovery = Not calculated							
Vt	19.7	0.00011	mg/L	0.000049	0.00011	mg/L	0.000049	45.30%
	QC value within limits for V Recovery = Not calculated							
Znt	3.8	0.00008	mg/L	0.000004	0.00008	mg/L	0.000004	4.82%
	QC value within limits for Zn Recovery = Not calculated							

QC Failed. Continue with analysis.

Sequence No.: 54  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 2/6/2008 21:33:33  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	425723.3	90.8 %	0.15			0.16%
Yr	266538.0	93.4 %	0.03			0.04%
Al†	24513.7	5.16 mg/L	0.004	5.16 mg/L	0.004	0.07%
	QC value within limits for Al Recovery = 103.26%					
B_†	79447.4	2.52 mg/L	0.004	2.52 mg/L	0.004	0.15%
	QC value within limits for B_ Recovery = 100.81%					
Ba†	384607.1	5.09 mg/L	0.010	5.09 mg/L	0.010	0.20%
	QC value within limits for Ba Recovery = 101.88%					
Be†	6680079.1	2.06 mg/L	0.006	2.06 mg/L	0.006	0.31%
	QC value within limits for Be Recovery = 102.94%					
Ca†	383318.3	51.4 mg/L	0.04	51.4 mg/L	0.04	0.08%
	QC value within limits for Ca Recovery = 102.79%					
Cd†	54662.6	2.04 mg/L	0.006	2.04 mg/L	0.006	0.28%
	QC value within limits for Cd Recovery = 102.13%					
Co†	130663.6	5.14 mg/L	0.002	5.14 mg/L	0.002	0.03%
	QC value within limits for Co Recovery = 102.84%					
Cr†	403604.2	5.11 mg/L	0.009	5.11 mg/L	0.009	0.17%
	QC value within limits for Cr Recovery = 102.12%					
Cu†	2254715.4	5.03 mg/L	0.023	5.03 mg/L	0.023	0.46%
	QC value within limits for Cu Recovery = 100.66%					
Fe†	4739.6	5.11 mg/L	0.030	5.11 mg/L	0.030	0.60%
	QC value within limits for Fe Recovery = 102.18%					
K†	68400.4	50.1 mg/L	0.36	50.1 mg/L	0.36	0.73%
	QC value within limits for K Recovery = 100.25%					
Mg†	143516.6	50.6 mg/L	0.04	50.6 mg/L	0.04	0.07%
	QC value within limits for Mg Recovery = 101.23%					
Mn†	2994684.2	5.15 mg/L	0.008	5.15 mg/L	0.008	0.15%
	QC value within limits for Mn Recovery = 103.04%					
Mo†	64782.9	5.01 mg/L	0.003	5.01 mg/L	0.003	0.06%
	QC value within limits for Mo Recovery = 100.23%					
Na†	209789.6	49.7 mg/L	0.23	49.7 mg/L	0.23	0.47%
	QC value within limits for Na Recovery = 99.46%					
Ni†	115196.8	5.19 mg/L	0.007	5.19 mg/L	0.007	0.14%
	QC value within limits for Ni Recovery = 103.80%					
Pb†	24864.3	5.21 mg/L	0.001	5.21 mg/L	0.001	0.01%
	QC value within limits for Pb Recovery = 104.17%					
V†	919429.2	5.05 mg/L	0.008	5.05 mg/L	0.008	0.16%
	QC value within limits for V Recovery = 101.00%					
Zn†	246097.5	5.18 mg/L	0.006	5.18 mg/L	0.006	0.11%
	QC value within limits for Zn Recovery = 103.69%					

All analyte(s) passed QC.

Sequence No.: 55  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/6/2008 21:36:46  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	451685.6	96.3 %	0.33			0.34%
Yr	275621.3	96.5 %	0.44			0.45%
Alf	-27.8	-0.00586 mg/L	0.000238	-0.00586 mg/L	0.000238	4.07%
	QC value within limits for Al Recovery = Not calculated					
B_f	1097.9	0.0350 mg/L	0.00117	0.0350 mg/L	0.00117	3.35%
	QC value greater than the upper limit for B Recovery = Not calculated					
Baf	-1.0	-0.00001 mg/L	0.000043	-0.00001 mg/L	0.000043	322.18%
	QC value within limits for Ba Recovery = Not calculated					
Bef	-33.5	-0.00001 mg/L	0.000016	-0.00001 mg/L	0.000016	152.26%
	QC value within limits for Be Recovery = Not calculated					
Caf	-14.1	-0.00189 mg/L	0.000610	-0.00189 mg/L	0.000610	32.36%
	QC value within limits for Ca Recovery = Not calculated					
Cdf	3.1	0.00011 mg/L	0.000044	0.00011 mg/L	0.000044	38.61%
	QC value within limits for Cd Recovery = Not calculated					
Cof	-1.1	-0.00005 mg/L	0.000042	-0.00005 mg/L	0.000042	93.56%
	QC value within limits for Co Recovery = Not calculated					
Crf	20.8	0.00026 mg/L	0.000139	0.00026 mg/L	0.000139	52.68%
	QC value within limits for Cr Recovery = Not calculated					
Cuf	584.3	0.00130 mg/L	0.000063	0.00130 mg/L	0.000063	4.85%
	QC value within limits for Cu Recovery = Not calculated					
Fef	2.1	0.00224 mg/L	0.000368	0.00224 mg/L	0.000368	16.45%
	QC value within limits for Fe Recovery = Not calculated					
Kf	31.8	0.0233 mg/L	0.00237	0.0233 mg/L	0.00237	10.20%
	QC value within limits for K Recovery = Not calculated					
Mgf	-4.3	-0.00151 mg/L	0.001051	-0.00151 mg/L	0.001051	69.64%
	QC value within limits for Mg Recovery = Not calculated					
Mnf	-478.1	-0.00082 mg/L	0.000005	-0.00082 mg/L	0.000005	0.59%
	QC value within limits for Mn Recovery = Not calculated					
Mof	18.0	0.00139 mg/L	0.000057	0.00139 mg/L	0.000057	4.12%
	QC value within limits for Mo Recovery = Not calculated					
Naf	851.8	0.202 mg/L	0.0029	0.202 mg/L	0.0029	1.43%
	QC value within limits for Na Recovery = Not calculated					
Nif	-4.0	-0.00018 mg/L	0.000154	-0.00018 mg/L	0.000154	84.69%
	QC value within limits for Ni Recovery = Not calculated					
Pbf	12.1	0.00253 mg/L	0.000427	0.00253 mg/L	0.000427	16.86%
	QC value within limits for Pb Recovery = Not calculated					
Vf	19.6	0.00011 mg/L	0.000101	0.00011 mg/L	0.000101	93.42%
	QC value within limits for V Recovery = Not calculated					
Znf	-7.1	-0.00015 mg/L	0.000095	-0.00015 mg/L	0.000095	63.81%
	QC value within limits for Zn Recovery = Not calculated					
	QC Failed. Retry.					

Sequence No.: 56  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/6/2008 21:39:19  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	450085.5	96.0 %	0.01			0.01%
Yr	275889.4	96.6 %	0.23			0.24%
Alf	-30.2	-0.00636 mg/L	0.008851	-0.00636 mg/L	0.008851	139.16%
	QC value within limits for Al Recovery = Not calculated					
B_f	885.0	0.0282 mg/L	0.00034	0.0282 mg/L	0.00034	1.19%
	QC value greater than the upper limit for B Recovery = Not calculated					
Baf	-3.4	-0.00005 mg/L	0.000062	-0.00005 mg/L	0.000062	137.40%

QC value within limits for Ba	Recovery = Not calculated				
Be <sub>f</sub> -37.4	-0.00001 mg/L	0.000045	-0.00001 mg/L	0.000045	390.45%
QC value within limits for Be	Recovery = Not calculated				
Ca <sub>f</sub> -18.0	-0.00242 mg/L	0.000604	-0.00242 mg/L	0.000604	24.97%
QC value within limits for Ca	Recovery = Not calculated				
Cd <sub>f</sub> 4.5	0.00017 mg/L	0.000125	0.00017 mg/L	0.000125	74.54%
QC value within limits for Cd	Recovery = Not calculated				
Co <sub>f</sub> -1.2	-0.00005 mg/L	0.000067	-0.00005 mg/L	0.000067	145.56%
QC value within limits for Co	Recovery = Not calculated				
Cr <sub>f</sub> 11.3	0.00014 mg/L	0.000076	0.00014 mg/L	0.000076	53.66%
QC value within limits for Cr	Recovery = Not calculated				
Cu <sub>f</sub> 425.0	0.00095 mg/L	0.000082	0.00095 mg/L	0.000082	8.66%
QC value within limits for Cu	Recovery = Not calculated				
Fe <sub>f</sub> 0.9	0.00098 mg/L	0.001222	0.00098 mg/L	0.001222	125.04%
QC value within limits for Fe	Recovery = Not calculated				
K <sub>f</sub> 14.1	0.0103 mg/L	0.01494	0.0103 mg/L	0.01494	144.62%
QC value within limits for K	Recovery = Not calculated				
Mg <sub>f</sub> -6.0	-0.00211 mg/L	0.002560	-0.00211 mg/L	0.002560	121.26%
QC value within limits for Mg	Recovery = Not calculated				
Mn <sub>f</sub> -485.0	-0.00083 mg/L	0.000013	-0.00083 mg/L	0.000013	1.61%
QC value within limits for Mn	Recovery = Not calculated				
Mo <sub>f</sub> 6.0	0.00047 mg/L	0.000086	0.00047 mg/L	0.000086	18.39%
QC value within limits for Mo	Recovery = Not calculated				
Na <sub>f</sub> 843.9	0.200 mg/L	0.0129	0.200 mg/L	0.0129	6.46%
QC value within limits for Na	Recovery = Not calculated				
Ni <sub>f</sub> -11.6	-0.00052 mg/L	0.000049	-0.00052 mg/L	0.000049	9.46%
QC value within limits for Ni	Recovery = Not calculated				
Pb <sub>f</sub> 9.1	0.00190 mg/L	0.000735	0.00190 mg/L	0.000735	38.60%
QC value within limits for Pb	Recovery = Not calculated				
V <sub>f</sub> 10.2	0.00006 mg/L	0.000008	0.00006 mg/L	0.000008	14.78%
QC value within limits for V	Recovery = Not calculated				
Zn <sub>f</sub> -13.1	-0.00027 mg/L	0.000011	-0.00027 mg/L	0.000011	4.01%
QC value within limits for Zn	Recovery = Not calculated				

QC Failed. Retry.

Sequence No.: 57  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/6/2008 21:41:52  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	449451.4	95.8 %		0.49			0.51%
Yr	272246.2	95.4 %		1.15			1.20%
Al <sub>f</sub> -8.2	-0.00173 mg/L		0.006732		-0.00173 mg/L	0.006732	390.24%
QC value within limits for Al	Recovery = Not calculated						
B <sub>f</sub> 796.8	0.0254 mg/L		0.00072		0.0254 mg/L	0.00072	2.84%
QC value greater than the upper limit for B	Recovery = Not calculated						
Ba <sub>f</sub> -4.1	-0.00005 mg/L		0.000049		-0.00005 mg/L	0.000049	90.75%
QC value within limits for Ba	Recovery = Not calculated						
Be <sub>f</sub> 12.4	0.00000 mg/L		0.000029		0.00000 mg/L	0.000029	757.01%
QC value within limits for Be	Recovery = Not calculated						
Ca <sub>f</sub> -12.6	-0.00168 mg/L		0.001720		-0.00168 mg/L	0.001720	102.23%
QC value within limits for Ca	Recovery = Not calculated						
Cd <sub>f</sub> -0.3	-0.00001 mg/L		0.000029		-0.00001 mg/L	0.000029	268.09%
QC value within limits for Cd	Recovery = Not calculated						
Co <sub>f</sub> -4.0	-0.00016 mg/L		0.000182		-0.00016 mg/L	0.000182	116.19%
QC value within limits for Co	Recovery = Not calculated						
Cr <sub>f</sub> 11.7	0.00015 mg/L		0.000082		0.00015 mg/L	0.000082	55.80%
QC value within limits for Cr	Recovery = Not calculated						
Cu <sub>f</sub> 263.7	0.00059 mg/L		0.000057		0.00059 mg/L	0.000057	9.69%
QC value within limits for Cu	Recovery = Not calculated						
Fe <sub>f</sub> 0.1	0.00014 mg/L		0.003173		0.00014 mg/L	0.003173	>999.9%
QC value within limits for Fe	Recovery = Not calculated						
K <sub>f</sub> 83.2	0.0609 mg/L		0.03072		0.0609 mg/L	0.03072	50.40%
QC value within limits for K	Recovery = Not calculated						
Mg <sub>f</sub> -5.2	-0.00184 mg/L		0.000211		-0.00184 mg/L	0.000211	11.46%
QC value within limits for Mg	Recovery = Not calculated						

Mnt	-484.9	-0.00083 mg/L	0.000004	-0.00083 mg/L	0.000004	0.46%
	QC value within limits for Mn	Recovery = Not calculated				
Mof	2.6	0.00020 mg/L	0.000252	0.00020 mg/L	0.000252	125.25%
	QC value within limits for Mo	Recovery = Not calculated				
Naf	890.6	0.211 mg/L	0.0047	0.211 mg/L	0.0047	2.23%
	QC value within limits for Na	Recovery = Not calculated				
Nif	-5.6	-0.00025 mg/L	0.000132	-0.00025 mg/L	0.000132	52.44%
	QC value within limits for Ni	Recovery = Not calculated				
Pbf	7.8	0.00164 mg/L	0.000940	0.00164 mg/L	0.000940	57.37%
	QC value within limits for Pb	Recovery = Not calculated				
Vf	21.1	0.00012 mg/L	0.000019	0.00012 mg/L	0.000019	16.01%
	QC value within limits for V	Recovery = Not calculated				
Znf	-18.0	-0.00038 mg/L	0.000064	-0.00038 mg/L	0.000064	16.76%
	QC value within limits for Zn	Recovery = Not calculated				

QC Failed. Continue with analysis.



Sequence No.: 58  
 Sample ID: MBLANK  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 65  
 Date Collected: 2/6/2008 21:45:15  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MBLANK

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Sca	455040.5	97.0	%	0.69			0.71%
Yr	278356.5	97.5	%	0.02			0.02%
Al†	-38.9	-0.00819	mg/L	0.005222	-0.00819	mg/L	63.73%
B_†	719.5	0.0229	mg/L	0.00041	0.0229	mg/L	1.77%
Ba†	7.2	0.00010	mg/L	0.000043	0.00010	mg/L	44.72%
Be†	13.5	0.00000	mg/L	0.000015	0.00000	mg/L	372.03%
Cat	121.7	0.0163	mg/L	0.00072	0.0163	mg/L	4.43%
Cd†	1.1	0.00004	mg/L	0.000146	0.00004	mg/L	371.94%
Co†	-4.0	-0.00016	mg/L	0.000008	-0.00016	mg/L	5.02%
Crt	8.1	0.00010	mg/L	0.000049	0.00010	mg/L	47.73%
Cu†	241.3	0.00054	mg/L	0.000164	0.00054	mg/L	30.47%
Fe†	-0.9	-0.00098	mg/L	0.002140	-0.00098	mg/L	219.35%
K†	60.6	0.0444	mg/L	0.01326	0.0444	mg/L	29.83%
Mg†	-3.3	-0.00116	mg/L	0.000577	-0.00116	mg/L	49.65%
Mn†	-476.2	-0.00082	mg/L	0.000001	-0.00082	mg/L	0.06%
Mo†	1.9	0.00015	mg/L	0.000135	0.00015	mg/L	89.64%
Na†	863.3	0.205	mg/L	0.0025	0.205	mg/L	1.20%
Ni†	-7.3	-0.00033	mg/L	0.000060	-0.00033	mg/L	18.28%
Pb†	2.8	0.00058	mg/L	0.000972	0.00058	mg/L	168.28%
V†	13.1	0.00007	mg/L	0.000004	0.00007	mg/L	5.74%
Zn†	148.9	0.00316	mg/L	0.000005	0.00316	mg/L	0.17%

Sequence No.: 59  
 Sample ID: MRL  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 21  
 Date Collected: 2/6/2008 21:48:53  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Sca	450337.9	96.0	%	0.48			0.50%
Yr	277903.8	97.3	%	1.32			1.35%
Alt	236.0	0.0497	mg/L	0.00306	0.0497	mg/L	0.00306 6.16%
B_t	2181.0	0.0694	mg/L	0.00063	0.0694	mg/L	0.00063 0.91%
Baf	1568.1	0.0208	mg/L	0.00018	0.0208	mg/L	0.00018 0.85%
Bet	3156.0	0.00097	mg/L	0.000027	0.00097	mg/L	0.000027 2.74%
Caf	7688.1	1.03	mg/L	0.010	1.03	mg/L	0.010 1.00%
Cdt	173.4	0.00662	mg/L	0.000125	0.00662	mg/L	0.000125 1.88%
Cof	1328.5	0.0523	mg/L	0.00058	0.0523	mg/L	0.00058 1.10%
Crt	844.3	0.0107	mg/L	0.00016	0.0107	mg/L	0.00016 1.49%
Cuf	4737.0	0.0106	mg/L	0.00015	0.0106	mg/L	0.00015 1.40%
Fef	21.6	0.0233	mg/L	0.00196	0.0233	mg/L	0.00196 8.43%
Kf	1408.4	1.03	mg/L	0.034	1.03	mg/L	0.034 3.30%
Mgt	286.5	0.101	mg/L	0.0004	0.101	mg/L	0.0004 0.42%
Mnt	794.6	0.00137	mg/L	0.000011	0.00137	mg/L	0.000011 0.79%
Mot	263.7	0.0204	mg/L	0.00042	0.0204	mg/L	0.00042 2.04%
Naf	4985.6	1.18	mg/L	0.027	1.18	mg/L	0.027 2.27%
Nit	473.5	0.0213	mg/L	0.00021	0.0213	mg/L	0.00021 0.99%
Pbt	108.5	0.0227	mg/L	0.00068	0.0227	mg/L	0.00068 3.01%
Vt	385.0	0.00216	mg/L	0.000001	0.00216	mg/L	0.000001 0.04%
Znt	986.3	0.0208	mg/L	0.00024	0.0208	mg/L	0.00024 1.17%

Sequence No.: 60  
 Sample ID: LCS  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 66  
 Date Collected: 2/6/2008 21:52:29  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Mean Data: LCS

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	427868.2		91.2 %	0.09			0.10%
Yr	266978.3		93.5 %	0.14			0.15%
Al†	9736.7		2.05 mg/L	0.007	2.05 mg/L	0.007	0.35%
B†	16025.7		0.508 mg/L	0.0056	0.508 mg/L	0.0056	1.11%
Ba†	76223.4		1.01 mg/L	0.009	1.01 mg/L	0.009	0.86%
Be†	168141.3		0.0518 mg/L	0.00008	0.0518 mg/L	0.00008	0.15%
Ca†	377976.3		50.7 mg/L	0.15	50.7 mg/L	0.15	0.29%
Cd†	5626.1		0.212 mg/L	0.0016	0.212 mg/L	0.0016	0.77%
Co†	26152.3		1.03 mg/L	0.009	1.03 mg/L	0.009	0.87%
Cr†	80890.6		1.02 mg/L	0.003	1.02 mg/L	0.003	0.25%
Cu†	448517.5		1.00 mg/L	0.001	1.00 mg/L	0.001	0.14%
Fe†	4844.2		5.22 mg/L	0.002	5.22 mg/L	0.002	0.03%
K†	27422.4		20.1 mg/L	0.02	20.1 mg/L	0.02	0.09%
Mg†	57500.7		20.3 mg/L	0.03	20.3 mg/L	0.03	0.13%
Mn†	303639.2		0.522 mg/L	0.0011	0.522 mg/L	0.0011	0.22%
Mo†	12854.4		0.994 mg/L	0.0063	0.994 mg/L	0.0063	0.64%
Nat	206676.3		49.0 mg/L	0.08	49.0 mg/L	0.08	0.16%
Ni†	11477.3		0.517 mg/L	0.0041	0.517 mg/L	0.0041	0.79%
Pb†	4933.1		1.03 mg/L	0.003	1.03 mg/L	0.003	0.28%
V†	183767.4		1.01 mg/L	0.003	1.01 mg/L	0.003	0.26%
Zn†	49571.8		1.05 mg/L	0.010	1.05 mg/L	0.010	0.93%

Sequence No.: 61  
Sample ID: LCSD  
Analyst:  
Initial Sample Wt:  
Dilution: 1X

Autosampler Location: 67  
Date Collected: 2/6/2008 21:55:35  
Data Type: Original  
Initial Sample Vol:  
Sample Prep Vol:

Mean Data: LCSD

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	436273.8	93.0 %		0.60			0.65%
Yr	271150.4	95.0 %		0.19			0.20%
Alf	9499.2	2.00 mg/L		0.015	2.00 mg/L	0.015	0.74%
B_lf	15707.9	0.498 mg/L		0.0014	0.498 mg/L	0.0014	0.29%
Bat	74918.7	0.992 mg/L		0.0016	0.992 mg/L	0.0016	0.16%
BeF	165565.6	0.0510 mg/L		0.00003	0.0510 mg/L	0.00003	0.07%
CaF	362760.1	48.6 mg/L		0.15	48.6 mg/L	0.15	0.32%
Cdf	5526.3	0.208 mg/L		0.0007	0.208 mg/L	0.0007	0.32%
Cof	25643.0	1.01 mg/L		0.002	1.01 mg/L	0.002	0.18%
Crt	79571.1	1.01 mg/L		0.004	1.01 mg/L	0.004	0.39%
Cuf	445438.9	0.994 mg/L		0.0034	0.994 mg/L	0.0034	0.34%
Fef	4711.6	5.08 mg/L		0.004	5.08 mg/L	0.004	0.07%
Kf	26187.0	19.2 mg/L		0.06	19.2 mg/L	0.06	0.33%
Mgf	54955.0	19.4 mg/L		0.03	19.4 mg/L	0.03	0.16%
Mnf	299820.6	0.516 mg/L		0.0023	0.516 mg/L	0.0023	0.45%
Mof	12639.0	0.978 mg/L		0.0020	0.978 mg/L	0.0020	0.20%
Naf	198507.9	47.1 mg/L		0.03	47.1 mg/L	0.03	0.06%
Nif	11263.6	0.507 mg/L		0.0003	0.507 mg/L	0.0003	0.07%
Pbf	4876.0	1.02 mg/L		0.006	1.02 mg/L	0.006	0.59%
Vf	181365.0	0.996 mg/L		0.0017	0.996 mg/L	0.0017	0.17%
Znf	48642.7	1.03 mg/L		0.004	1.03 mg/L	0.004	0.39%

Sequence No.: 62  
 Sample ID: 2802050292  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 68  
 Date Collected: 2/6/2008 21:58:00  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 2802050292

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Sca	446633.0	95.2	%	1.53			1.61%
Yr	283181.3	99.2	%	0.58			0.58%
Alf	357.2	0.0752	mg/L	0.00722	0.0752	mg/L	0.00722 9.60%
B_f	5135.7	0.164	mg/L	0.0020	0.164	mg/L	0.0020 1.25%
Baf	6914.7	0.0916	mg/L	0.00172	0.0916	mg/L	0.00172 1.88%
Bef	-119.6	-0.00004	mg/L	0.000012	-0.00004	mg/L	0.000012 33.80%
Caf	364215.7	48.8	mg/L	0.03	48.8	mg/L	0.03 0.06%
Cdf	-19.6	-0.00072	mg/L	0.000111	-0.00072	mg/L	0.000111 15.32%
Cof	-0.6	-0.00003	mg/L	0.000137	-0.00003	mg/L	0.000137 547.01%
Crf	-5.1	-0.00007	mg/L	0.000133	-0.00007	mg/L	0.000133 205.19%
Cuf	35367.1	0.0789	mg/L	0.00078	0.0789	mg/L	0.00078 1.00%
Fef	5.5	0.00591	mg/L	0.002165	0.00591	mg/L	0.002165 36.62%
Kf	5252.2	3.85	mg/L	0.057	3.85	mg/L	0.057 1.48%
Mgf	57540.1	20.3	mg/L	0.05	20.3	mg/L	0.05 0.24%
Mnf	3630.0	0.00624	mg/L	0.000126	0.00624	mg/L	0.000126 2.02%
Mof	60.1	0.00465	mg/L	0.000253	0.00465	mg/L	0.000253 5.43%
Naf	333992.1	79.2	mg/L	1.24	79.2	mg/L	1.24 1.57%
Nif	13.3	0.00060	mg/L	0.000043	0.00060	mg/L	0.000043 7.18%
Pbf	5.5	0.00116	mg/L	0.000774	0.00116	mg/L	0.000774 66.67%
Vf	786.3	0.00429	mg/L	0.000110	0.00429	mg/L	0.000110 2.56%
Znf	44932.0	0.953	mg/L	0.0055	0.953	mg/L	0.0055 0.57%

Sequence No.: 63  
 Sample ID: 2802050292MS  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 69  
 Date Collected: 2/6/2008 22:02:17  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 2802050292MS

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	424760.7	90.6 %	%	0.19			0.22%
Yr	269578.5	94.4 %	%	1.23			1.30%
Alf	9845.0	2.07 mg/L	mg/L	0.024	2.07 mg/L	0.024	1.15%
B_t	20813.5	0.661 mg/L	mg/L	0.0007	0.661 mg/L	0.0007	0.10%
Baf	83034.8	1.10 mg/L	mg/L	0.001	1.10 mg/L	0.001	0.11%
Be_f	162159.1	0.0500 mg/L	mg/L	0.00003	0.0500 mg/L	0.00003	0.07%
Ca_f	725070.2	97.2 mg/L	mg/L	0.14	97.2 mg/L	0.14	0.14%
Cd_f	5698.0	0.215 mg/L	mg/L	0.0008	0.215 mg/L	0.0008	0.37%
Co_f	25772.0	1.01 mg/L	mg/L	0.001	1.01 mg/L	0.001	0.10%
Cr_f	78937.2	0.999 mg/L	mg/L	0.0013	0.999 mg/L	0.0013	0.13%
Cu_f	467547.5	1.04 mg/L	mg/L	0.001	1.04 mg/L	0.001	0.07%
Fe_f	4691.2	5.06 mg/L	mg/L	0.001	5.06 mg/L	0.001	0.02%
K_f	31508.4	23.1 mg/L	mg/L	0.15	23.1 mg/L	0.15	0.66%
Mg_f	112551.9	39.7 mg/L	mg/L	0.07	39.7 mg/L	0.07	0.18%
Mn_f	304331.5	0.524 mg/L	mg/L	0.0006	0.524 mg/L	0.0006	0.11%
Mo_f	12658.8	0.979 mg/L	mg/L	0.0022	0.979 mg/L	0.0022	0.23%
Na_f	534764.4	127 mg/L	mg/L	0.4	127 mg/L	0.4	0.30%
Ni_f	11294.8	0.509 mg/L	mg/L	0.0046	0.509 mg/L	0.0046	0.90%
Pb_f	4820.4	1.01 mg/L	mg/L	0.003	1.01 mg/L	0.003	0.34%
V_f	181457.6	0.997 mg/L	mg/L	0.0007	0.997 mg/L	0.0007	0.07%
Zn_f	95726.8	2.03 mg/L	mg/L	0.001	2.03 mg/L	0.001	0.06%

Sequence No.: 68  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 2/6/2008 22:20:47  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	427581.3	91.2	%	0.21			0.23%
Yr	272730.1	95.5	%	2.06			2.15%
Al†	24233.8	5.10	mg/L	0.106	5.10 mg/L	0.106	2.07%
	QC value within limits for Al	Recovery = 102.08%					
B_†	79149.8	2.51	mg/L	0.012	2.51 mg/L	0.012	0.46%
	QC value within limits for B_	Recovery = 100.43%					
Ba†	382589.2	5.07	mg/L	0.008	5.07 mg/L	0.008	0.16%
	QC value within limits for Ba	Recovery = 101.35%					
Be†	6585236.9	2.03	mg/L	0.029	2.03 mg/L	0.029	1.44%
	QC value within limits for Be	Recovery = 101.48%					
Ca†	382202.8	51.2	mg/L	0.90	51.2 mg/L	0.90	1.76%
	QC value within limits for Ca	Recovery = 102.49%					
Cd†	54568.2	2.04	mg/L	0.002	2.04 mg/L	0.002	0.12%
	QC value within limits for Cd	Recovery = 101.95%					
Co†	130143.6	5.12	mg/L	0.017	5.12 mg/L	0.017	0.34%
	QC value within limits for Co	Recovery = 102.43%					
Cr†	407016.9	5.15	mg/L	0.001	5.15 mg/L	0.001	0.02%
	QC value within limits for Cr	Recovery = 102.98%					
Cu†	2218692.2	4.95	mg/L	0.014	4.95 mg/L	0.014	0.28%
	QC value within limits for Cu	Recovery = 99.05%					
Fe†	4726.3	5.09	mg/L	0.100	5.09 mg/L	0.100	1.96%
	QC value within limits for Fe	Recovery = 101.89%					
K†	68766.4	50.4	mg/L	0.93	50.4 mg/L	0.93	1.84%
	QC value within limits for K	Recovery = 100.78%					
Mg†	144387.8	50.9	mg/L	0.88	50.9 mg/L	0.88	1.73%
	QC value within limits for Mg	Recovery = 101.84%					
Mn†	2963478.3	5.10	mg/L	0.018	5.10 mg/L	0.018	0.35%
	QC value within limits for Mn	Recovery = 101.97%					
Mo†	64438.4	4.98	mg/L	0.009	4.98 mg/L	0.009	0.18%
	QC value within limits for Mo	Recovery = 99.69%					
Na†	211001.2	50.0	mg/L	1.17	50.0 mg/L	1.17	2.34%
	QC value within limits for Na	Recovery = 100.03%					
Ni†	114379.7	5.15	mg/L	0.007	5.15 mg/L	0.007	0.13%
	QC value within limits for Ni	Recovery = 103.07%					
Pb†	24704.7	5.17	mg/L	0.010	5.17 mg/L	0.010	0.19%
	QC value within limits for Pb	Recovery = 103.50%					
V†	909391.3	5.00	mg/L	0.010	5.00 mg/L	0.010	0.20%
	QC value within limits for V	Recovery = 99.91%					
Zn†	244726.9	5.16	mg/L	0.003	5.16 mg/L	0.003	0.06%
	QC value within limits for Zn	Recovery = 103.11%					

All analyte(s) passed QC.

Sequence No.: 69  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/6/2008 22:24:00  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	458945.5	97.8 %		0.46			0.47%
Yr	281773.4	98.7 %		0.23			0.24%
Alf	-21.7	-0.00457 mg/L		0.002156	-0.00457 mg/L	0.002156	47.17%
	QC value within limits for Al Recovery = Not calculated						
B_f	878.3	0.0280 mg/L		0.00103	0.0280 mg/L	0.00103	3.67%
	QC value greater than the upper limit for B Recovery = Not calculated						
Baf	7.3	0.00010 mg/L		0.000064	0.00010 mg/L	0.000064	66.22%
	QC value within limits for Ba Recovery = Not calculated						
Be_f	1.3	0.00000 mg/L		0.000026	0.00000 mg/L	0.000026	>999.9%
	QC value within limits for Be Recovery = Not calculated						
Ca_f	-22.1	-0.00296 mg/L		0.000007	-0.00296 mg/L	0.000007	0.22%
	QC value within limits for Ca Recovery = Not calculated						
Cd_f	1.2	0.00005 mg/L		0.000028	0.00005 mg/L	0.000028	61.95%
	QC value within limits for Cd Recovery = Not calculated						
Co_f	-1.3	-0.00005 mg/L		0.000089	-0.00005 mg/L	0.000089	168.98%
	QC value within limits for Co Recovery = Not calculated						
Cr_f	7.8	0.00010 mg/L		0.000020	0.00010 mg/L	0.000020	20.71%
	QC value within limits for Cr Recovery = Not calculated						
Cu_f	527.5	0.00118 mg/L		0.000175	0.00118 mg/L	0.000175	14.91%
	QC value within limits for Cu Recovery = Not calculated						
Fe_f	1.3	0.00142 mg/L		0.000581	0.00142 mg/L	0.000581	40.94%
	QC value within limits for Fe Recovery = Not calculated						
K_f	35.1	0.0257 mg/L		0.00085	0.0257 mg/L	0.00085	3.29%
	QC value within limits for K Recovery = Not calculated						
Mg_f	-2.4	-0.00083 mg/L		0.000154	-0.00083 mg/L	0.000154	18.43%
	QC value within limits for Mg Recovery = Not calculated						
Mn_f	-412.2	-0.00071 mg/L		0.000006	-0.00071 mg/L	0.000006	0.85%
	QC value within limits for Mn Recovery = Not calculated						
Mo_f	13.0	0.00100 mg/L		0.000446	0.00100 mg/L	0.000446	44.54%
	QC value within limits for Mo Recovery = Not calculated						
Na_f	656.2	0.156 mg/L		0.0034	0.156 mg/L	0.0034	2.17%
	QC value within limits for Na Recovery = Not calculated						
Ni_f	-7.5	-0.00034 mg/L		0.000172	-0.00034 mg/L	0.000172	50.88%
	QC value within limits for Ni Recovery = Not calculated						
Pb_f	8.0	0.00167 mg/L		0.000818	0.00167 mg/L	0.000818	49.09%
	QC value within limits for Pb Recovery = Not calculated						
V_f	12.9	0.00007 mg/L		0.000035	0.00007 mg/L	0.000035	49.15%
	QC value within limits for V Recovery = Not calculated						
Zn_f	-8.6	-0.00018 mg/L		0.000124	-0.00018 mg/L	0.000124	69.41%
	QC value within limits for Zn Recovery = Not calculated						
QC Failed. Retry.							

Sequence No.: 70  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/6/2008 22:26:33  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	458536.3	97.8 %		0.21			0.22%
Yr	278984.2	97.7 %		0.87			0.89%
Alf	-39.7	-0.00837 mg/L		0.000206	-0.00837 mg/L	0.000206	2.46%
	QC value within limits for Al Recovery = Not calculated						
B_f	690.7	0.0220 mg/L		0.00063	0.0220 mg/L	0.00063	2.85%
	QC value greater than the upper limit for B Recovery = Not calculated						
Baf	-0.3	0.00000 mg/L		0.000072	0.00000 mg/L	0.000072	>999.9%



QC value within limits for Ba	Recovery = Not calculated					
Bef	37.7	0.00001 mg/L	0.000002	0.00001 mg/L	0.000002	16.61%
QC value within limits for Be	Recovery = Not calculated					
Ca†	-17.1	-0.00229 mg/L	0.000733	-0.00229 mg/L	0.000733	32.00%
QC value within limits for Ca	Recovery = Not calculated					
Cd†	1.2	0.00004 mg/L	0.000040	0.00004 mg/L	0.000040	94.50%
QC value within limits for Cd	Recovery = Not calculated					
Co†	-5.8	-0.00023 mg/L	0.000055	-0.00023 mg/L	0.000055	23.87%
QC value within limits for Co	Recovery = Not calculated					
Cr†	9.9	0.00012 mg/L	0.000119	0.00012 mg/L	0.000119	95.23%
QC value within limits for Cr	Recovery = Not calculated					
Cu†	304.9	0.00068 mg/L	0.000025	0.00068 mg/L	0.000025	3.62%
QC value within limits for Cu	Recovery = Not calculated					
Fe†	0.2	0.00017 mg/L	0.003039	0.00017 mg/L	0.003039	>999.9%
QC value within limits for Fe	Recovery = Not calculated					
K†	56.0	0.0411 mg/L	0.00530	0.0411 mg/L	0.00530	12.91%
QC value within limits for K	Recovery = Not calculated					
Mg†	1.1	0.00040 mg/L	0.001005	0.00040 mg/L	0.001005	253.40%
QC value within limits for Mg	Recovery = Not calculated					
Mn†	-418.2	-0.00072 mg/L	0.000000	-0.00072 mg/L	0.000000	0.06%
QC value within limits for Mn	Recovery = Not calculated					
Mo†	7.2	0.00056 mg/L	0.000278	0.00056 mg/L	0.000278	49.96%
QC value within limits for Mo	Recovery = Not calculated					
Na†	673.7	0.160 mg/L	0.0057	0.160 mg/L	0.0057	3.58%
QC value within limits for Na	Recovery = Not calculated					
Ni†	-5.5	-0.00025 mg/L	0.000156	-0.00025 mg/L	0.000156	62.83%
QC value within limits for Ni	Recovery = Not calculated					
Pb†	7.2	0.00152 mg/L	0.000387	0.00152 mg/L	0.000387	25.52%
QC value within limits for Pb	Recovery = Not calculated					
V†	20.5	0.00011 mg/L	0.000032	0.00011 mg/L	0.000032	28.71%
QC value within limits for V	Recovery = Not calculated					
Zn†	-18.2	-0.00038 mg/L	0.000019	-0.00038 mg/L	0.000019	4.81%
QC value within limits for Zn	Recovery = Not calculated					
QC Failed. Retry.						

Sequence No.: 71

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 0

Date Collected: 2/6/2008 22:29:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	462367.7	98.6 %		0.85			0.86%
Yr	276845.0	97.0 %		0.82			0.84%
Al†	2.6	0.00055 mg/L		0.007810	0.00055 mg/L	0.007810	>999.9%
QC value within limits for Al	Recovery = Not calculated						
B_†	619.2	0.0197 mg/L		0.00019	0.0197 mg/L	0.00019	0.97%
QC value within limits for B_	Recovery = Not calculated						
Ba†	-4.9	-0.00006 mg/L		0.000027	-0.00006 mg/L	0.000027	42.27%
QC value within limits for Ba	Recovery = Not calculated						
Be†	49.8	0.00002 mg/L		0.000013	0.00002 mg/L	0.000013	87.05%
QC value within limits for Be	Recovery = Not calculated						
Ca†	-15.2	-0.00204 mg/L		0.000565	-0.00204 mg/L	0.000565	27.69%
QC value within limits for Ca	Recovery = Not calculated						
Cd†	-4.4	-0.00016 mg/L		0.000094	-0.00016 mg/L	0.000094	57.90%
QC value within limits for Cd	Recovery = Not calculated						
Co†	-1.0	-0.00004 mg/L		0.000044	-0.00004 mg/L	0.000044	107.74%
QC value within limits for Co	Recovery = Not calculated						
Cr†	8.5	0.00011 mg/L		0.000008	0.00011 mg/L	0.000008	7.20%
QC value within limits for Cr	Recovery = Not calculated						
Cu†	267.4	0.00060 mg/L		0.000004	0.00060 mg/L	0.000004	0.67%
QC value within limits for Cu	Recovery = Not calculated						
Fe†	-0.1	-0.00006 mg/L		0.001384	-0.00006 mg/L	0.001384	>999.9%
QC value within limits for Fe	Recovery = Not calculated						
K†	38.7	0.0284 mg/L		0.01681	0.0284 mg/L	0.01681	59.30%
QC value within limits for K	Recovery = Not calculated						
Mg†	-4.1	-0.00146 mg/L		0.000163	-0.00146 mg/L	0.000163	11.19%
QC value within limits for Mg	Recovery = Not calculated						

Mnt	-412.8	-0.00071 mg/L	0.000010	-0.00071 mg/L	0.000010	1.44%
	QC value within limits for Mn Recovery = Not calculated					
Mof	3.4	0.00027 mg/L	0.000050	0.00027 mg/L	0.000050	18.61%
	QC value within limits for Mo Recovery = Not calculated					
Na†	624.3	0.148 mg/L	0.0098	0.148 mg/L	0.0098	6.59%
	QC value within limits for Na Recovery = Not calculated					
Nif	-9.0	-0.00041 mg/L	0.000188	-0.00041 mg/L	0.000188	46.42%
	QC value within limits for Ni Recovery = Not calculated					
Pbt	7.9	0.00166 mg/L	0.000406	0.00166 mg/L	0.000406	24.45%
	QC value within limits for Pb Recovery = Not calculated					
V†	10.6	0.00006 mg/L	0.000103	0.00006 mg/L	0.000103	174.83%
	QC value within limits for V Recovery = Not calculated					
Znt	-22.2	-0.00047 mg/L	0.000064	-0.00047 mg/L	0.000064	13.60%
	QC value within limits for Zn Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 72  
 Sample ID: MCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 5  
 Date Collected: 2/6/2008 22:32:29  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	448717.5	95.7 %	0.09			0.09%
Yr	277247.1	97.1 %	0.21			0.22%
Al†	12154.0	2.56 mg/L	0.001	2.56 mg/L	0.001	0.05%
	QC value within limits for Al Recovery = 102.39%					
B_†	38852.2	1.23 mg/L	0.002	1.23 mg/L	0.002	0.15%
	QC value within limits for B_ Recovery = 98.59%					
Ba†	191631.3	2.54 mg/L	0.000	2.54 mg/L	0.000	0.01%
	QC value within limits for Ba Recovery = 101.52%					
Be†	3288472.8	1.01 mg/L	0.000	1.01 mg/L	0.000	0.02%
	QC value within limits for Be Recovery = 101.35%					
Ca†	191101.3	25.6 mg/L	0.06	25.6 mg/L	0.06	0.23%
	QC value within limits for Ca Recovery = 102.49%					
Cd†	26687.1	0.997 mg/L	0.0014	0.997 mg/L	0.0014	0.14%
	QC value within limits for Cd Recovery = 99.73%					
Co†	64455.1	2.54 mg/L	0.004	2.54 mg/L	0.004	0.14%
	QC value within limits for Co Recovery = 101.46%					
Cr†	199595.9	2.52 mg/L	0.001	2.52 mg/L	0.001	0.04%
	QC value within limits for Cr Recovery = 101.00%					
Cu†	1101732.8	2.46 mg/L	0.006	2.46 mg/L	0.006	0.24%
	QC value within limits for Cu Recovery = 98.37%					
Fe†	2375.7	2.56 mg/L	0.001	2.56 mg/L	0.001	0.02%
	QC value within limits for Fe Recovery = 102.43%					
K†	33979.4	24.9 mg/L	0.15	24.9 mg/L	0.15	0.61%
	QC value within limits for K Recovery = 99.60%					
Mg†	72443.8	25.5 mg/L	0.08	25.5 mg/L	0.08	0.33%
	QC value within limits for Mg Recovery = 102.20%					
Mn†	1497724.6	2.58 mg/L	0.002	2.58 mg/L	0.002	0.06%
	QC value within limits for Mn Recovery = 103.07%					
Mo†	31729.7	2.45 mg/L	0.008	2.45 mg/L	0.008	0.32%
	QC value within limits for Mo Recovery = 98.18%					
Na†	104526.1	24.8 mg/L	0.06	24.8 mg/L	0.06	0.26%
	QC value within limits for Na Recovery = 99.11%					
Ni†	56914.3	2.56 mg/L	0.002	2.56 mg/L	0.002	0.08%
	QC value within limits for Ni Recovery = 102.57%					
Pb†	12312.0	2.58 mg/L	0.010	2.58 mg/L	0.010	0.40%
	QC value within limits for Pb Recovery = 103.16%					
V†	451099.3	2.48 mg/L	0.000	2.48 mg/L	0.000	0.02%
	QC value within limits for V Recovery = 99.11%					
Zn†	121441.8	2.56 mg/L	0.002	2.56 mg/L	0.002	0.07%
	QC value within limits for Zn Recovery = 102.33%					

All analyte(s) passed QC.

Sequence No.: 78  
 Sample ID: 2802050697\_2X  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 2X

Autosampler Location: 79  
 Date Collected: 2/6/2008 22:56:35  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 2802050697\_2X

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Sca	383719.4	81.8	%	0.25			0.30%
Yr	254096.4	89.0	%	0.70			0.79%
Alt	-32.6	-0.00687	mg/L	0.005562	-0.0137	mg/L	0.01112 81.00%
B <sub>1</sub>	57207.5	1.82	mg/L	0.004	3.64	mg/L	0.008 0.22%
B <sub>2</sub>	984.5	0.0130	mg/L	0.00004	0.0261	mg/L	0.00009 0.34%
Be <sub>1</sub>	-1406.6	-0.00043	mg/L	0.000011	-0.00087	mg/L	0.000022 2.51%
Ca <sub>1</sub>	1663703.4	223	mg/L	1.5	446	mg/L	2.9 0.66%
Cd <sub>1</sub>	-7.7	-0.00027	mg/L	0.000113	-0.00055	mg/L	0.000226 41.16%
Co <sub>1</sub>	68.8	0.00271	mg/L	0.000560	0.00541	mg/L	0.001121 20.71%
Crt	1637.0	0.0207	mg/L	0.00023	0.0414	mg/L	0.00045 1.10%
Cu <sub>1</sub>	995.8	0.00222	mg/L	0.000112	0.00445	mg/L	0.000224 5.03%
Fe <sub>1</sub>	39.2	0.0423	mg/L	0.00304	0.0845	mg/L	0.00609 7.20%
K <sub>1</sub>	21956.1	16.1	mg/L	0.00	32.2	mg/L	0.00 0.01%
Mg <sub>1</sub>	292724.1	103	mg/L	0.6	206	mg/L	1.2 0.57%
Mn <sub>1</sub>	295569.9	0.508	mg/L	0.00006	1.02	mg/L	0.001 0.11%
Mo <sub>1</sub>	498.8	0.0386	mg/L	0.00004	0.0772	mg/L	0.00008 0.11%
Na <sub>1</sub>	3103370.7	736	mg/L	4.6	1470	mg/L	9.2 0.63%
Ni <sub>1</sub>	132.0	0.00595	mg/L	0.000147	0.0119	mg/L	0.00029 2.48%
Pb <sub>1</sub>	-32.7	-0.00686	mg/L	0.001277	-0.0137	mg/L	0.00255 18.62%
V <sub>1</sub>	4409.9	0.0242	mg/L	0.00001	0.0484	mg/L	0.00002 0.04%
Zn <sub>1</sub>	37.4	0.00075	mg/L	0.000030	0.00151	mg/L	0.000059 3.95%

EPA 200.7/6010B QC Check List

MED21508

Analyst CSK Analysis Date 2-11-08 Reviewer/Date 2-12-08

Instrument PerKin Elmer Optima 4300DV

All sample analyzed within 6 month holding time

All sample raw concentration below the high standard or linear range o  
marked for dilution  
and rerun

Initial and closing QC

ICV within +/- 5%  
 Linearity check +/- 10%  
 ICSAB +/- 20%  
 QCS +/- 5%  
 MRL +/- 50%

Middle, closing and batch QC

FilterCheck < 1/2 MRL  
 MBLANK < 1/2 MRL  
 LCS +/-15%  
 MS/MSD +/-30%(200.7) +/- 25% (6010B)  
 CCV/MCV/ECV +/- 10%  
 ICB/CCB/ECB < 1/2 MRL  
 CCB ran after the CCV

General QC

RPD between MS/MSD is within +/-20%  
 RPD between LCS/LCSD is within +/- 20%  
 Internal standards 60 TO 125%  
 All pH of the samples are < 2

No more than 20 samples per batch

MS is run at frequency of 1 every 10 samples and MSD is  
run at frequency of 1 every 20 samples

NA QIR needed for failed QC

NA Special Det Code noted on the cover sheet

NA R value for multi point calibration is > 0.995

NA Proper MRL check ran for special low MRL samples

Reagent and Standards used for  
Optima 4300 DV  
Updated 01/11/08

Int: CSK  
Date: 2-12-08

Method 200.7/6010

# ICP SUMMARY SHEET

File ID: 080211  
 Date Started: 2/11/08  
 Analyst ID: csk

## SAMPLE ID

LINEARITY	(18:48)	Wash	(18:59)	FILTERCHECK	(19:38)
2802010008	(19:51)	2802050265_2	(20:02)	2802050757	(20:17)
2802050757	(20:38)	2801300506	(20:43)	2801300508	(20:47)
2801300509	(20:51)	2801300512_2	(20:56)	2801300515	(21:00)
2801300516	(21:05)	2802050266	(21:09)	2802050560	(21:13)
2802050267	(21:43)	2802050658	(21:47)	2802050386	(21:50)
2802050566	(21:55)	2802050567	(21:59)	2802050700	(22:03)
2802050291	(22:08)	2802050694	(22:12)	2802050699	(22:16)
2802080108	(22:45)	2802080111	(22:55)	2802080112	(22:59)
2802080113	(23:03)	2802080114	(23:19)	2802080115	(23:23)
2802080116	(23:27)	2802080117	(23:31)	2802080118	(23:35)
2802080119	(23:39)	2801150171	(23:43)	2802060676	(23:54)
2802060679	(0:07)	D801300513_2	(0:11)	2802050238	(0:15)
2802050246	(0:20)	2802050247	(0:24)	2802070100	(0:28)
2802070104	(0:33)	2802070106	(0:36)	2802060371_2	(0:41)
2802050696_1	(0:45)	2802060371	(1:02)	LINEARITY	(8:24)
Wash	(8:35)	1PPM	(9:48)		

COMMENT:

From 2802010008 to 2802050699 is Re-run of 080208 for "B"  
2801150171 is Recheck  
Digestion sample: 280206371 & 280205696 RC Link to  
080210.

Analyst: CSK  
2-12-08

Approved By: MED21508

Peer Reviewed by Bill 2/12/08

BATCH NUMBER for 080211

Test Parameter:

SCA YR AG AL B\_ BA BE CA CD CO CR CU FE K MG MN MO NA NI PB

Batch ID: 2802010008

2802010008	2802050265_2X	2802050757
2802050757	2801300506	2801300508
2801300509	2801300512_2X	2801300515
2801300516	2802050266	2802050560
2802050267	2802050658	2802050386
2802050566	2802050567	2802050700
2802050291	2802050694	2802050699

Batch ID: 2802080108

2802080108	2802080111	2802080112
2802080113	2802080114	2802080115
2802080116	2802080117	2802080118
2802080119	2801150171	2802060676
2802060679	2802050238	2802050246
2802050247	2802070100	2802070104
2802070106	2802060371_2X	2802050696_10X
2802060371		

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
ICV	2/11/08	18:44	1	9.9704	9.97	95-105	99.7%
LINEARITY	2/11/08	18:48	1	0.0017	.0017		
ICSA	2/11/08	18:51	1	-0.0004	ND	80-120	
ICSAB	2/11/08	18:55	1	.24597	.246	80-120	98.3%
Wash	2/11/08	18:59	1	0.0000	0.0000		
QC-25 1ppm	2/11/08	19:14	1	1.0204	1.0		
CCV	2/11/08	19:18	1	5.2196	5.22	90-110	104%
ICB	2/11/08	19:24	1	0.0000	0		
MRL	2/11/08	19:27	1	0.0101	.0101	50-150	101%
MRL/2	2/11/08	19:30	1	0.0052	.0052		
MRL/5	2/11/08	19:34	1	0.0021	.0021		
FILTERCHECK	2/11/08	19:38	1	0.0001	0.0001		
MBLANK	2/11/08	19:41	1	0.0001	0.0000		
LCS	2/11/08	19:45	1	1.0123	1.01	85-115	101%
LCSD	2/11/08	19:48	1	1.0090	1.01	85-115	100%
2802010008	2/11/08	19:51	1	-0.0004	ND		
2802010008MS	2/11/08	19:55	1	.99987	1.00	[ 1.000]	99.9%
2802010008MSD	2/11/08	19:58	1	1.0018	1.00	[ 1.002]	100%
2802010008T	2/11/08	19:58	1		1.00	70 - 130	
2802050265_2X	2/11/08	20:02	2	-0.0001	ND		
CCV	2/11/08	20:06	1	5.2482	5.25	90-110	104%
CCB	2/11/08	20:14	1	0.0001	0.0001		
2802050757	2/11/08	20:17	1	0.0015	.0015		
CCB	2/11/08	20:35	1	0.0001	0.0001		
2802050757	2/11/08	20:38	1	0.0016	.0016		
2801300506	2/11/08	20:43	1	-0.0010	ND		
2801300508	2/11/08	20:47	1	-0.0007	ND		
2801300509	2/11/08	20:51	1	-0.0008	ND		
2801300512_2X	2/11/08	20:56	2	-0.0001	ND		
2801300515	2/11/08	21:00	1	-0.0008	ND		
2801300516	2/11/08	21:05	1	-0.0008	ND		
2802050266	2/11/08	21:09	1	-0.0007	ND		
2802050560	2/11/08	21:13	1	0.0003	0.0002		
2802050560MS	2/11/08	21:18	1	1.0344	1.03	[ 1.034]	103%
CCV	2/11/08	21:21	1	5.2695	5.27	90-110	105%
CCB	2/11/08	21:32	1	-0.0000	ND		
MCV	2/11/08	21:36	1	2.6086	2.61	90-110	104%
2802050560MSD	2/11/08	21:40	1	1.0116	1.01	[ 1.012]	101%
2802050560T	2/11/08	21:40	1		1.00	70 - 130	
2802050267	2/11/08	21:43	1	-0.0007	ND		
2802050658	2/11/08	21:47	1	-0.0008	ND		
2802050386	2/11/08	21:50	1	0.0065	.0065		
2802050566	2/11/08	21:55	1	-0.0009	ND		
2802050567	2/11/08	21:59	1	-0.0009	ND		
2802050700	2/11/08	22:03	1	-0.0007	ND		
2802050291	2/11/08	22:08	1	0.0016	.0016		

↓ DNR  
ex  
2-11-08



Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
2802050694	2/11/08	22:12	1	-0.0006	ND		
2802050699	2/11/08	22:16	1	-0.0006	ND		
CCV	2/11/08	22:20	1	5.2134	5.21	90-110	104%
CCB	2/11/08	22:28	1	-0.0001	ND		
MBLANK	2/11/08	22:32	1	0.0000	0.0000		
MRL	2/11/08	22:35	1	.01023	.0102	50-150	102%
LCS	2/11/08	22:39	1	1.0065	1.01	85-115	100%
LCSD	2/11/08	22:42	1	1.0080	1.01	85-115	100%
2802080108	2/11/08	22:45	1	-0.0006	ND		
2802080108MS	2/11/08	22:49	1	1.0013	1.00	[ 1.001]	100%
2802080108MSD	2/11/08	22:52	1	1.0026	1.00	[ 1.003]	100%
2802080108T	2/11/08	22:52	1		1.00	70 - 130	
2802080111	2/11/08	22:55	1	-0.0006	ND		
2802080112	2/11/08	22:59	1	-0.0006	ND		
2802080113	2/11/08	23:03	1	-0.0007	ND		
CCV	2/11/08	23:07	1	5.185	5.18	90-110	103%
CCB	2/11/08	23:12	1	0.0000	0.0000		
MCV	2/11/08	23:16	1	2.5832	2.58	90-110	103%
2802080114	2/11/08	23:19	1	-0.0006	ND		
2802080115	2/11/08	23:23	1	-0.0006	ND		
2802080116	2/11/08	23:27	1	0.0148	.015		
2802080117	2/11/08	23:31	1	-0.0006	ND		
2802080118	2/11/08	23:35	1	-0.0007	ND		
2802080119	2/11/08	23:39	1	-0.0005	ND		
2801150171	2/11/08	23:43	1	-0.0011	ND		
2801150171MS	2/11/08	23:48	1	1.0320	1.03	[ 1.032]	103%
2801150171MSD	2/11/08	23:51	1	1.0238	1.02	[ 1.024]	102%
2801150171T	2/11/08	23:51	1		1.00	70 - 130	
2802060676	2/11/08	23:54	1	-0.0008	ND		
CCV	2/11/08	23:58	1	5.2551	5.26	90-110	105%
CCB	2/12/08	0:04	1	-0.0001	ND		
2802060679	2/12/08	0:07	1	-0.0005	ND		
D801300513_2X	2/12/08	0:11	2	-0.0007	ND		
2802050238	2/12/08	0:15	1	-0.0008	ND		
2802050246	2/12/08	0:20	1	-0.0006	ND		
2802050247	2/12/08	0:24	1	-0.0006	ND		
2802070100	2/12/08	0:28	1	0.0060	.006		
2802070104	2/12/08	0:33	1	0.0084	.0084		
2802070106	2/12/08	0:36	1	-0.0005	ND		
2802060371_2X	2/12/08	0:41	2	0.0140	.014		
2802050696_10X	2/12/08	0:45	10	0.0090	.009		
CCV	2/12/08	0:49	1	5.3295	5.33	90-110	106%
CCB	2/12/08	0:55	1	-0.0000	ND		
MCV	2/12/08	0:59	1	2.5943	2.59	90-110	103%
2802060371	2/12/08	1:02	1	0.0141	.014		
ECV	2/12/08	1:07	1	5.2677	5.27	90-110	105%
ECB	2/12/08	1:15	1	-0.0000	ND		
ICV	2/12/08	8:21	1	9.9557	9.96	95-105	99.5%

Sample ID	Time	SCA	YR	AG	AL	B	BA	BE	CA	CD	CO	CR
ICV	18:44	N/A	N/A	2.01/2	10.2/10	5.06	10.0/10	4.05/4	100/100	5.06/5	10.0	9.97/10
LINEARITY	18:48	N/A	N/A	-0.036	-0.006	0.053	0.002	-0.000	294/300	-0.000	0.002	0.002
ICSA	18:51	N/A	N/A	-0.035	249/250	0.016	0.002	-0.000	249/250	-0.000	0.000	-0.000
ICSAB	18:55	N/A	N/A	0.472	248/250	0.005	0.259/.25	0.247/.25	249/250	0.493/.5	0.239/.25	0.246/.25
Wash	18:59	N/A	N/A	0.0003	0.0020	0.0087	-0.0000	0.0000	-0.0005	0.0001	0.0000	0.0000
OC-25 ppm	19:14	N/A	N/A	0.9686	0.9910	0.9692	1.063	1.021	1.031	0.9970	1.074	1.020
CCV	19:18	N/A	N/A	1.00/1	5.03/5	2.58	5.22/5	2.14/2	51.6/50	2.09/2	5.26	5.22/5
ICB	19:24	N/A	N/A	0.0003	0.0053	0.0174	-0.0002	-0.0000	-0.0065	0.0001	-0.0002	0.0000
MRL	19:27	N/A	N/A	0.010/.01	0.047/.05	0.061	0.020/.02	0.001/.001	1.02/1	0.006/.005	0.052/.05	0.010/.01
MRL/2	19:30	N/A	N/A	0.005/.01	0.024(.05)	0.037	0.010/.02	0.000(.001)	0.518/1	0.003/.005	0.026/.05	0.005/.01
MRL/5	19:34	N/A	N/A	0.002(.01)	0.007(.05)	0.022	0.004(.02)	0.000(.001)	0.207(1)	0.001(.005)	0.011(.05)	0.002(.01)
FILTERCHECK	19:38	N/A	N/A	0.0000	-0.0047	0.0114	-0.0002	-0.0000	-0.0079	0.0001	-0.0001	0.0001
MBLANK	19:41	N/A	N/A	0.0002	-0.0022	0.0111	-0.0003	-0.0001	-0.0039	-0.0000	-0.0002	0.0001
LCS	19:45	N/A	N/A	0.483/.5	1.94/2	0.501	1.02/1	0.053/.05	51.5/50	0.212/.2	1.03/1	1.01/1
LCSB	19:48	N/A	N/A	0.483/.5	1.90/2	0.505	1.02/1	0.053/.05	50.6/50	0.212/.2	1.03/1	1.01/1
2802010008	19:51	N/A	N/A	0.0002	-0.0017	1.844	0.0341	-0.0001	4.507	0.0000	-0.0002	-0.0004
2802010008MS	19:55	N/A	N/A	0.4449	1.949	2.322	1.067	0.0520	56.18	0.2153	1.030	0.9999
2802010008MSD	19:58	N/A	N/A	0.4495	1.929	2.318	1.075	0.0521	54.40	0.2156	1.030	1.002
2802050265_2X	20:02	N/A	N/A	-0.0003	0.0795	4.954	0.0083	-0.0016	366.5	-0.0018	-0.0023	-0.0001
CCV	20:06	N/A	N/A	1.01/1	5.11/5	2.63	5.26/5	2.14/2	51.2/50	2.11/2	5.28	5.25/5
CCB	20:14	N/A	N/A	0.0003	-0.0006	0.0283	-0.0002	-0.0000	-0.0056	0.0002	-0.0001	0.0001
2802050757	20:17	N/A	N/A	0.0004	-0.0008	0.4395	0.0572	-0.0001	95.38	-0.0008	-0.0002	0.0015
CC4	20:35	N/A	N/A	0.0002	-0.0026	0.0240	-0.0003	-0.0000	-0.0110	-0.0000	-0.0003	0.0001
2802050757	20:38	N/A	N/A	0.0003	-0.0042	0.4416	0.0575	-0.0002	96.32	-0.0008	-0.0005	0.0016
2801300506	20:43	N/A	N/A	0.0001	-0.0013	0.2238	0.0794	-0.0002	64.06	-0.0007	-0.0005	-0.0010
2801300508	20:47	N/A	N/A	-0.0001	0.0016	0.2124	0.0756	-0.0001	44.23	-0.0006	-0.0005	-0.0007
2801300509	20:51	N/A	N/A	0.0001	0.0110	0.1975	0.0654	-0.0001	35.03	-0.0004	-0.0003	-0.0008
2801300512_2X	20:56	N/A	N/A	0.0005	0.0098	0.6511	0.0456	-0.0003	30.28	-0.0008	-0.0004	-0.0001
2801300515	21:00	N/A	N/A	0.0004	-0.0019	0.2122	0.0389	-0.0002	52.09	-0.0004	-0.0005	-0.0008
2801300516	21:05	N/A	N/A	0.0004	0.0047	0.4460	0.0175	-0.0001	25.32	-0.0004	-0.0005	-0.0008
2802050266	21:09	N/A	N/A	-0.0001	-0.0046	0.9077	-0.0002	-0.0002	0.1512	-0.0001	-0.0003	-0.0007
2802050560	21:13	N/A	N/A	0.0001	-0.0017	0.0385	0.1203	-0.0002	82.83	-0.0008	-0.0005	0.0003
2802050560MS	21:18	N/A	N/A	0.4536	2.039	0.5448	1.166	0.0531	130.7	0.2201	1.034	1.034
CCV	21:21	N/A	N/A	1.01/1	5.15/5	2.61	5.29/5	2.15/2	51.3/50	2.12/2	5.31	5.27/5
CCB	21:32	N/A	N/A	0.0002	0.0001	0.0226	-0.0003	-0.0000	-0.0131	-0.0000	-0.0002	-0.0000
MCV	21:36	N/A	N/A	0.479/.5	2.53/2.5	1.28	2.65/2.5	1.08/1	25.8/25	1.04/1	2.64	2.61/2.5
2802050560MSD	21:40	N/A	N/A	0.4206	1.970	0.5541	1.145	0.0521	130.5	0.2178	1.020	1.012
2802050267	21:43	N/A	N/A	0.0002	0.0008	0.5667	-0.0001	-0.0001	0.0015	-0.0002	-0.0002	-0.0007
2802050658	21:47	N/A	N/A	0.0003	-0.0002	0.0426	-0.0003	-0.0000	-0.0088	-0.0001	0.0001	-0.0008
2802050386	21:50	N/A	N/A	-0.0000	0.0003	0.2170	0.0778	-0.0002	94.02	-0.0008	-0.0002	0.0065
2802050566	21:55	N/A	N/A	0.0001	-0.0076	0.1219	0.1871	-0.0002	91.65	-0.0009	-0.0005	-0.0009
2802050567	21:59	N/A	N/A	0.0002	-0.0100	0.1202	0.1896	-0.0002	90.19	-0.0008	-0.0006	-0.0009
2802050700	22:03	N/A	N/A	0.0001	0.0049	0.1865	0.1059	-0.0002	86.38	-0.0008	-0.0005	-0.0007
2802050291	22:08	N/A	N/A	0.0001	0.0261	0.1481	0.0736	-0.0001	51.76	-0.0008	-0.0006	0.0016
2802050694	22:12	N/A	N/A	0.0003	0.0352	0.0227	0.0043	-0.0001	23.45	-0.0006	-0.0004	-0.0006
2802050699	22:16	N/A	N/A	-0.0000	0.0011	0.2118	0.0570	-0.0002	111.6	-0.0008	-0.0003	-0.0006
CCV	22:20	N/A	N/A	1.00/1	5.13/5	2.57	5.22/5	2.13/2	51.3/50	2.08/2	5.25	5.21/5
CCB	22:28	N/A	N/A	-0.0000	0.0021	0.0180	-0.0003	-0.0001	-0.0127	-0.0001	-0.0002	-0.0001
MBLANK	22:32	N/A	N/A	0.0002	-0.0008	0.0158	-0.0003	-0.0000	-0.0094	-0.0000	-0.0000	0.0000

Landscape Summary

File ID: 080211

Date: 2/11/08

Analyst: csk

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Sample ID	Time	SCA	YR	AG	AL	B	BA	BE	CA	CD	CO	CR
MRL	22:35	N/A	N/A	0.010/.01	0.046/.05	0.062	0.021/.02	0.001/.001	1.01/1	0.006/.005	0.052/.05	0.010/.01
LCS	22:39	N/A	N/A	0.475/.5	1.90/2	0.496	1.01/1	0.052/.05	50.8/50	0.209/.2	1.02/1	1.01/1
LCSD	22:42	N/A	N/A	0.482/.5	1.98/2	0.504	1.02/1	0.053/.05	51.0/50	0.210/.2	1.03/1	1.01/1
2802080108	22:45	N/A	N/A	0.0003	0.0031	0.0313	0.0084	-0.0001	2.846	-0.0002	0.0029	-0.0006
2802080108MSD	22:49	N/A	N/A	0.4397	1.990	0.5196	1.021	0.0517	53.51	0.2118	1.026	1.001
2802080111	22:52	N/A	N/A	0.4572	1.990	0.5219	1.028	0.0518	53.32	0.2136	1.032	1.003
2802080112	22:55	N/A	N/A	0.0001	-0.0008	0.1243	0.0334	-0.0001	17.04	-0.0002	0.0017	-0.0006
2802080113	22:59	N/A	N/A	0.0000	-0.012	0.0116	-0.0000	-0.0001	0.0117	-0.0002	0.0005	-0.0006
CCV	23:03	N/A	N/A	0.0001	0.0025	0.0307	0.0080	-0.0000	3.257	-0.0002	0.0017	-0.0007
CCB	23:07	N/A	N/A	0.999/1	5.17/5	2.55	5.21/5	2.13/2	51.2/50	2.08/2	5.23	5.18/5
MCV	23:12	N/A	N/A	0.0002	-0.0015	0.0183	-0.0004	-0.0001	-0.0129	-0.0001	-0.0005	0.0000
2802080114	23:16	N/A	N/A	0.478/.5	2.55/2.5	1.28	2.62/2.5	1.06/1	25.7/25	1.03/1	2.63	2.58/2.5
2802080115	23:19	N/A	N/A	-0.0000	-0.0056	0.0179	-0.0000	-0.0000	-0.0135	0.0000	0.0002	-0.0006
2802080116	23:23	N/A	N/A	0.0000	0.0027	0.0215	0.0142	-0.0001	6.183	-0.0001	0.0004	-0.0006
2802080117	23:27	N/A	N/A	0.0029	1.025	0.1868	0.1087	0.0547	42.11	0.0057	-0.0005	0.0148
2802080118	23:31	N/A	N/A	0.0001	0.0128	0.1854	0.0366	-0.0001	21.19	-0.0004	-0.0003	-0.0006
2802080119	23:35	N/A	N/A	0.0001	0.0030	0.0187	0.0126	-0.0001	5.676	-0.0003	0.0015	-0.0007
2801150171MS	23:39	N/A	N/A	-0.0001	0.0111	0.1920	0.0368	-0.0002	21.49	-0.0004	-0.0003	-0.0005
2801150171MSD	23:43	N/A	N/A	0.0002	-0.0049	0.1567	0.1563	-0.0002	80.43	-0.0008	-0.0007	-0.0011
2802060676	23:48	N/A	N/A	0.4359	2.030	0.6664	1.185	0.0520	128.3	0.2196	1.056	1.024
CCV	23:51	N/A	N/A	0.4345	2.029	0.6602	1.191	0.0522	128.7	0.2191	1.045	1.024
CCB	23:54	N/A	N/A	-0.0001	0.0033	0.1848	0.0406	-0.0002	89.27	-0.0007	-0.0004	-0.0008
MCV	23:58	N/A	N/A	1.01/1	5.27/5	2.59	5.27/5	2.13/2	51.6/50	2.11/2	5.30	5.26/5
CCV	0:04	N/A	N/A	0.0002	0.0018	0.0178	-0.0003	-0.0000	-0.0142	-0.0003	-0.0004	-0.0001
2802060679	0:07	N/A	N/A	0.0000	-0.0064	0.0232	-0.0002	-0.0000	-0.0141	0.0000	-0.0002	-0.0005
D801300513_2X	0:11	N/A	N/A	-0.0004	-0.0078	0.3310	0.1719	-0.0005	149.2	-0.0020	-0.0012	-0.0007
2802050238	0:15	N/A	N/A	0.0001	0.0288	0.1549	0.1574	-0.0002	77.88	-0.0010	-0.0004	-0.0008
2802050246	0:20	N/A	N/A	0.0001	0.0043	0.1053	0.1933	-0.0002	84.83	-0.0010	-0.0006	-0.0006
2802050247	0:24	N/A	N/A	-0.0005	0.0110	0.1042	0.2218	-0.0002	85.67	-0.0010	-0.0003	-0.0006
2802070100	0:28	N/A	N/A	0.0001	-0.0059	0.1174	0.0827	-0.0002	75.16	-0.0008	-0.0005	0.0060
2802070104	0:33	N/A	N/A	0.0000	0.0050	0.1659	0.0833	-0.0001	34.44	-0.0006	-0.0007	0.0084
2802070106	0:36	N/A	N/A	0.0004	-0.0036	0.0635	0.0635	-0.0002	75.23	-0.0008	-0.0006	-0.0005
2802060371_2X	0:41	N/A	N/A	0.0009	0.2390	1.163	0.1848	-0.0006	217.3	0.0016	-0.0002	0.0140
2802050696_10X	0:45	N/A	N/A	0.0031	0.0114	3.651	0.0263	-0.0018	450.4	-0.0025	0.0157	0.0090
CCV	0:49	N/A	N/A	1.02/1	5.25/5	2.63	5.33/5	2.14/2	51.5/50	2.14/2	5.37	5.33/5
CCB	0:55	N/A	N/A	0.0001	0.0012	0.0164	-0.0003	-0.0000	-0.0141	0.0001	-0.0002	-0.0000
MCV	0:59	N/A	N/A	0.482/.5	2.60/2.5	1.29	2.63/2.5	1.06/1	25.8/25	1.05/1	2.66	2.59/2.5
2802060371	1:02	N/A	N/A	0.0002	0.2255	1.155	0.1825	-0.0004	212.9	0.0021	0.0008	0.0141
ECV	1:07	N/A	N/A	1.02/1	5.20/5	2.61	5.26/5	2.16/2	51.5/50	2.11/2	5.30	5.27/5
ECB	1:15	N/A	N/A	0.0000	0.0016	0.0204	-0.0004	-0.0000	-0.0133	-0.0000	-0.0003	-0.0000
ICV	8:21	N/A	N/A	2.00/2	10.1/10	5.12	10.0/10	4.08/4	100/100	5.11/5	10.1	9.96/10
LINEARITY	8:24	N/A	N/A	-0.034	-0.003	0.044	0.002	-0.000	295/300	-0.001	0.003	0.001
ICSAE	8:28	N/A	N/A	-0.033	247/250	0.016	0.002	-0.000	249/250	-0.002	0.001	-0.000
Wash	8:31	N/A	N/A	0.473	248/250	0.007	0.254/.25	0.244/.25	251/250	0.492/.5	0.237/.25	0.244/.25
QC-25 ppm	8:35	N/A	N/A	0.0008	-0.0065	0.0115	-0.0000	0.0000	0.0038	0.0001	0.0000	0.0001
CCV	8:40	N/A	N/A	0.9590	1.019	1.023	1.085	0.9928	1.059	1.030	1.111	1.065
ICB	8:44	N/A	N/A	0.975/1	4.98/5	2.55	5.03/5	2.06/2	50.5/50	2.04/2	5.15	5.04/5
CCB	8:59	N/A	N/A	-0.0003	0.0144	0.0129	-0.0001	0.0000	0.0094	0.0001	-0.0003	-0.0001
ICPPM	9:45	N/A	N/A	-0.0002	-0.0121	0.0084	-0.0000	-0.0001	0.0012	-0.0001	-0.0002	-0.0001
ICPPM	9:48	N/A	N/A	0.6302	1.026	0.9826	1.062	0.9714	1.093	1.007	1.086	1.042

Sample ID	Time	CU	PE	K	MG	MN	MO	NA	NI	PB	V	ZN
ICV	18:44	10.1/10	10.2/10	100/100	101/100	10.1/10	9.98/10	100/100	10.0/10	9.99/10	10.1/10	9.93/10
LINEARITY	18:48	0.028	101	313	192	0.003	0.003	302/300	0.000	-0.002	-0.003	0.032
ICSA	18:51	0.026	100/100	0.225	237/250	0.003	0.001	0.131	-0.001	-0.035	-0.003	0.024
ICSAB	18:55	0.279/.25	99.8/100	0.112	237/250	0.261/.25	0.001	0.084	0.469/.5	0.457/.5	0.246/.25	0.544/.5
Wash	18:59	0.0011	0.0069	0.0272	-0.0076	-0.004	0.0003	-0.0047	0.0002	0.0021	0.0001	0.0003
QC-25 ppm	19:14	1.028	1.061	9.422	1.047	1.079	0.9919	0.9555	1.092	1.076	1.001	1.064
CCV	19:18	5.22/5	5.29/5	49.4/50	51.4/50	5.32/5	5.15/5	50.0/50	5.30/5	5.29/5	5.21/5	5.31/5
ICB	19:24	0.0001	0.0072	0.0153	-0.0152	-0.003	0.0006	-0.0093	0.0002	0.0005	0.0001	-0.0013
MRL	19:27	0.010/.01	0.025/.02	0.966/1	0.089/.1	0.002/.002	0.020/.02	0.965/1	0.021/.02	0.020/.02	0.002/.002	0.020/.02
MRL/2	19:30	0.005(.01)	0.014/.02	0.494(1)	0.035(.1)	0.001(.002)	0.011/.02	0.487(1)	0.011/.02	0.009(.02)	0.001/.002	0.012/.02
MRL/5	19:34	0.002(.01)	0.008(.02)	0.142(1)	0.007(.1)	0.000(.002)	0.004(.02)	0.189(1)	0.005(.02)	0.005(.02)	0.000(.002)	0.004(.02)
FILTERCHECK	19:38	-0.002	0.0036	-0.0103	-0.0160	-0.003	0.0001	-0.0099	0.0001	-0.0000	0.0000	-0.0014
MBLANK	19:41	-0.002	0.0017	-0.0085	-0.0133	-0.004	0.0001	-0.0084	0.0002	-0.0000	-0.0001	-0.0013
LCS	19:45	1.02/1	5.25/5	19.8/20	20.7/20	0.529/.5	1.000/1	49.2/50	0.518/.5	1.04/1	1.02/1	1.05/1
LCSD	19:48	1.02/1	5.10/5	19.0/20	19.9/20	0.526/.5	1.00/1	48.4/50	0.521/.5	1.05/1	1.02/1	1.05/1
2802010008	19:51	-0.001	0.0014	6.442	2.015	-0.003	0.0007	40.63	0.0004	-0.0006	0.0008	-0.0018
2802010008MS	19:55	1.020	5.172	25.96	22.62	0.5257	0.9670	88.06	0.5145	1.032	1.003	1.098
2802050265_2X	19:58	1.028	5.100	25.45	21.92	0.5287	0.9722	86.50	0.5143	1.031	1.006	1.097
CCV	20:06	5.23/5	5.23/5	49.8/50	50.8/50	5.32/5	5.18/5	N/A	-0.0014	-0.0260	0.0056	-0.0014
CCB	20:14	-0.008	0.0011	0.0678	-0.0112	-0.005	0.0005	50.2/50	5.33/5	5.33/5	5.18/5	5.35/5
2802050757	20:17	0.0349	0.0305	4.685	10.74	0.0017	0.0036	44.22	0.0000	-0.0016	-0.0000	-0.0021
CC4	20:35	-0.009	0.0276	0.0248	-0.0165	-0.004	0.0002	0.1096	0.0004	-0.0016	-0.0002	-0.0025
2801300506	20:43	-0.006	-0.0021	7.898	10.91	0.0017	0.0032	44.07	-0.0003	-0.0031	0.0060	0.0140
2801300508	20:47	-0.007	-0.004	16.97	27.53	0.0702	0.0044	145.1	-0.0003	-0.0049	0.0008	0.0134
2801300509	20:51	-0.011	0.0090	2.569	10.77	0.0063	0.0031	63.48	-0.0004	-0.0044	0.0034	-0.0031
2801300512_2X	20:56	-0.0014	0.0121	15.18	20.78	0.0607	0.0051	52.12	-0.0003	-0.0034	0.0005	-0.0041
2801300515	21:00	-0.005	0.0148	3.191	14.25	0.0554	0.0019	251.0	0.0003	-0.0065	0.0034	0.0417
2801300516	21:05	-0.008	-0.0003	2.923	9.364	0.0086	0.0017	96.60	-0.0001	-0.0045	0.0003	0.0035
2802050266	21:09	-0.009	-0.0026	2.309	0.4743	-0.007	-0.0002	44.74	-0.0002	-0.0029	0.0001	-0.0031
2802050560	21:13	-0.003	0.0011	0.7621	19.37	-0.005	0.0014	6.861	-0.0005	-0.0056	0.0008	0.0344
2802050560MS	21:18	1.023	5.27/5	21.00	39.26	0.5437	1.012	56.15	0.5192	1.032	1.044	1.142
CCV	21:21	5.25/5	5.25/5	50.1/50	50.9/50	5.36/5	5.21/5	50.1/50	5.36/5	5.36/5	5.24/5	5.37/5
CCB	21:32	-0.010	-0.0006	0.0258	-0.0231	-0.005	0.0003	0.0397	-0.0001	-0.0030	-0.0001	-0.0028
MCV	21:36	2.62/2.5	2.61/2.5	24.6/25	25.5/25	2.71/2.5	2.57/2.5	24.7/25	2.66/2.5	2.67/2.5	2.60/2.5	2.67/2.5
2802050560MSD	21:40	0.9998	5.146	20.84	39.00	0.5320	0.9976	56.30	0.5100	1.034	1.024	1.122
2802050267	21:43	-0.007	0.0021	0.7422	-0.0139	-0.007	0.0012	17.64	0.0000	-0.0017	-0.0001	-0.0019
2802050658	21:47	-0.012	-0.0002	0.0707	-0.0309	-0.008	0.0004	0.4778	-0.0001	-0.0013	-0.0002	-0.0029
2802050386	21:50	-0.003	0.0001	4.237	26.15	-0.003	0.0062	52.29	0.0001	-0.0055	0.0056	-0.0039
2802050566	21:55	0.0013	0.0010	5.503	29.15	-0.006	0.0040	51.07	0.0014	-0.0070	0.0002	-0.0049
2802050567	21:59	0.0012	-0.0023	28.69	28.69	-0.006	0.0036	49.61	0.0017	-0.0077	0.0003	-0.0048
2802050700	22:03	-0.007	-0.0010	3.610	16.16	-0.003	0.0036	60.33	0.0005	-0.0049	0.0041	-0.0030
2802050291	22:08	0.0036	0.0658	3.228	17.93	0.0027	0.0060	66.23	0.0003	-0.0045	0.0063	0.3882
2802050654	22:12	-0.009	0.0066	1.114	1.114	-0.006	0.0008	8.395	-0.0002	-0.0040	0.0000	0.0366
2802050659	22:16	0.0110	0.2145	1.924	24.95	0.0145	0.0025	72.64	-0.0002	-0.0063	0.0017	0.0021
CCV	22:20	5.22/5	5.32/5	49.5/50	50.9/50	5.32/5	5.13/5	49.4/50	5.30/5	5.29/5	5.20/5	5.31/5
CCB	22:28	-0.010	-0.0026	-0.043	-0.0245	-0.005	0.0003	0.0118	-0.0004	-0.0028	0.0000	-0.0028
MBLANK	22:32	-0.010	-0.0005	-0.0245	-0.0245	-0.005	0.0002	0.0154	0.0002	-0.0003	-0.0003	-0.0023

Landscape Summary

File ID: 080211

Date: 2/11/08

Analyst: csk

Page: 4

Sample ID	Time	CU	FE	K	MG	MO	MN	MO	NA	NI	PE	V	ZN
MRL	22:35	1.00/1	0.022/.02	0.965/1	0.080/.1	0.002/.002	0.518/.5	0.993/1	0.992/1	0.021/.02	0.018/.02	0.002/.002	0.018/.02
LCS	22:39	1.02/1	4.99/5	19.7/20	20.1/20	0.518/.5	0.526/.5	0.993/1	49.1/50	0.512/.5	1.05/1	0.999/1	1.04/1
LCS	22:42	1.02/1	5.19/5	20.1/20	20.5/20	0.518/.5	0.526/.5	1.01/1	49.1/50	0.518/.5	1.03/1	1.02/1	1.05/1
2802080108	22:45	0.0009	0.0044	0.6191	0.5227	0.0047	0.0014	0.0014	3.256	0.0002	-0.011	0.0006	-0.022
2802080108MSD	22:49	1.001	5.123	20.28	20.66	0.5268	0.9727	0.9817	51.82	0.5139	1.025	1.010	1.077
2802080108MSD	22:52	1.003	5.102	20.20	20.67	0.5279	0.9817	0.9817	51.66	0.5180	1.036	1.011	1.083
2802080111	22:55	0.0000	0.0069	3.192	13.44	0.0071	0.0027	0.0027	57.81	0.0006	-0.025	0.0040	0.0003
2802080112	22:59	-0.011	0.0020	0.0061	-0.186	0.0007	0.0005	0.0005	0.0996	-0.000	-0.027	-0.002	-0.025
2802080113	23:03	-0.012	0.0148	0.5861	0.6242	0.0237	0.0010	0.0010	3.383	0.0002	-0.010	0.0004	-0.029
CCV	23:07	5.20/5	5.22/5	49.8/50	50.9/50	5.30/5	5.11/5	5.11/5	49.6/50	5.26/5	5.24/5	5.17/5	5.28/5
CCB	23:12	-0.010	-0.001	-0.150	-0.226	-0.005	0.0007	0.0007	-0.081	-0.002	-0.027	-0.001	-0.028
MCV	23:16	2.59/2.5	2.63/2.5	24.3/25	25.6/25	2.68/2.5	2.56/2.5	2.56/2.5	24.5/25	2.66/2.5	2.65/2.5	2.58/2.5	2.66/2.5
2802080114	23:19	-0.010	0.0004	0.0195	-0.210	-0.006	0.0008	0.0008	0.0968	0.0002	-0.012	-0.002	-0.031
2802080115	23:23	-0.008	0.0042	0.6981	1.946	0.0015	0.0007	0.0007	2.620	0.0002	-0.018	0.0003	-0.028
2802080116	23:27	0.0067	1.084	13.53	34.78	0.0782	0.0020	0.0020	72.27	0.0549	-0.007	0.0040	0.1169
2802080117	23:31	-0.001	0.0194	3.258	14.24	0.0218	0.0017	0.0017	62.09	0.0006	-0.045	0.0038	-0.034
2802080118	23:35	-0.011	0.0073	0.6049	1.796	0.0891	0.0002	0.0002	2.395	0.0003	-0.037	0.0005	-0.037
2802080119	23:39	-0.002	0.0200	3.313	14.25	0.0223	0.0017	0.0017	62.39	0.0006	-0.045	0.0039	-0.036
2801150171	23:43	-0.004	0.0091	5.393	30.25	-0.008	0.0058	0.0058	97.11	0.0006	-0.053	0.0023	0.0189
2801150171MS	23:48	1.022	5.274	25.72	49.42	0.5378	1.007	1.007	144.3	0.5289	1.041	1.033	1.143
2801150171MSD	23:51	1.025	5.231	25.75	49.46	0.5402	1.003	1.003	144.5	0.5238	1.036	1.035	1.133
2802060676	23:54	-0.001	0.0791	1.714	24.43	0.0035	0.0051	0.0051	74.65	0.0011	-0.058	0.0032	-0.050
CCV	23:58	5.24/5	5.33/5	50.6/50	51.4/50	5.33/5	5.20/5	5.20/5	49.8/50	5.34/5	5.33/5	5.21/5	5.36/5
CCB	0:04	-0.011	-0.015	0.0029	-0.244	-0.005	0.0007	0.0007	-0.086	-0.002	-0.022	-0.002	-0.030
2802060679	0:07	-0.008	-0.020	3.189	3.200	-0.007	0.0001	0.0001	1.036	-0.002	-0.021	-0.002	-0.030
D801309513_2X	0:11	-0.008	0.0187	7.321	53.19	0.4662	0.0065	0.0065	421.5	-0.016	-0.111	0.0006	0.0001
2802050238	0:15	-0.004	0.0187	5.221	30.67	0.0017	0.0051	0.0051	99.81	0.0003	-0.052	0.0024	-0.055
2802050246	0:20	0.0016	0.0022	5.266	27.50	-0.002	0.0028	0.0028	45.45	0.0014	-0.059	0.0002	-0.020
2802050247	0:24	-0.002	1.669	5.308	27.76	0.4631	0.0031	0.0031	44.01	0.0010	-0.040	0.0004	-0.026
2802070100	0:28	-0.004	0.1995	3.525	31.46	0.0057	0.0019	0.0019	66.28	-0.005	-0.051	0.0111	0.0572
2802070104	0:33	0.0022	0.0107	2.792	9.100	-0.003	0.0034	0.0034	45.68	-0.009	-0.038	0.0106	-0.036
2802070106	0:36	-0.006	0.0179	1.352	22.47	-0.000	0.0020	0.0020	5.306	-0.005	-0.052	0.0002	0.0003
2802060371_2X	0:41	0.0943	0.4655	37.72	76.74	0.0375	0.0583	0.0583	370.7	0.0122	-0.096	0.0193	0.3350
2802050696_10X	0:45	-0.089	0.2280	28.50	203.9	1.116	0.5899	0.5899	1440.5	0.0519	-0.492	0.0498	-0.162
CCV	0:49	5.24/5	5.30/5	50.6/50	51.4/50	5.36/5	5.25/5	5.25/5	49.7/50	5.39/5	5.39/5	5.23/5	5.42/5
CCB	0:55	-0.014	-0.004	-0.184	-0.240	-0.004	0.0006	0.0006	0.0091	-0.001	-0.023	-0.001	-0.030
MCV	0:59	2.59/2.5	2.66/2.5	24.9/25	25.9/25	2.69/2.5	2.58/2.5	2.58/2.5	24.7/25	2.69/2.5	2.68/2.5	2.58/2.5	2.68/2.5
2802060371	1:02	0.0958	0.4537	38.02	74.57	0.0371	0.0571	0.0571	371.1	0.0129	-0.026	0.0194	0.3411
ECV	1:07	5.21/5	5.23/5	50.6/50	51.4/50	5.33/5	5.20/5	5.20/5	49.7/50	5.34/5	5.32/5	5.21/5	5.36/5
ECB	1:15	-0.015	-0.009	-0.373	-0.242	-0.005	0.0005	0.0005	0.0087	-0.004	-0.028	-0.001	-0.032
ICV	8:21	10.0/10	10.1/10	101/100	101/100	10.00/10	10.1/10	10.1/10	101/100	10.1/10	10.2/10	10.0/10	10.1/10
LINEARITY	8:24	-0.010	101	310	193	0.003	0.000	0.000	306/300	0.000	-0.005	-0.003	0.025
ICSA	8:28	-0.011	100/100	0.150	245/250	0.003	0.001	0.001	0.287	-0.001	-0.037	-0.003	0.018
ICSA	8:31	0.240/.25	101/100	0.181	246/250	0.253/.25	0.001	0.001	0.281	0.466/.5	0.461/.5	0.243/.25	0.530/.5
Wash	8:35	0.0032	0.0095	0.1003	0.0009	-0.007	0.0002	0.0002	0.0676	0.0000	-0.001	0.0002	-0.003
QC-25 ppm	8:40	1.035	1.087	10.24	1.096	1.083	1.034	1.034	1.281	1.139	1.131	1.017	1.086
CCV	8:44	5.01/5	5.14/5	49.5/50	51.0/50	5.08/5	5.04/5	5.04/5	50.2/50	5.21/5	5.21/5	5.00/5	5.18/5
ICB	8:59	0.0018	0.0059	-0.290	-0.008	-0.008	0.0004	0.0004	0.0339	0.0002	0.003	0.0003	-0.005
CCB	9:45	0.0001	-0.009	0.0307	0.0020	-0.001	0.0004	0.0004	0.0150	0.0001	-0.011	0.0003	-0.003
1PPM	9:48	1.016	1.093	10.03	1.117	1.063	0.9995	0.9995	1.048	1.103	1.092	0.9983	1.047

2/11/2008 17:58:16 Hg ReAlign... Actual peak offset (nm): 0.003  
Drift (nm): 0.001 Slit adjustment: 2

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	325756.3
-1.6	15.0	463455.2
-1.2	15.0	627888.6
-0.8	15.0	770181.1
-0.4	15.0	894217.5
0.0	15.0	939463.0
0.4	15.0	868436.4
0.8	15.0	780377.4
1.2	15.0	641286.8
1.6	15.0	476561.6
2.0	15.0	347398.3
0.0	10.0	8265.4
0.0	10.5	26579.6
0.0	11.0	45483.4
0.0	11.5	70698.3
0.0	12.0	111348.8
0.0	12.5	247928.8
0.0	13.0	349256.7
0.0	13.5	478524.1
0.0	14.0	635110.7
0.0	14.5	885840.5
0.0	15.0	942573.2
0.0	15.5	905051.7
0.0	16.0	800627.1
0.0	16.5	551381.4
0.0	17.0	414575.0
0.0	17.5	298097.0
0.0	18.0	211265.1
0.0	18.5	143590.6
0.0	19.0	45236.2
0.0	19.5	20133.5
0.0	20.0	8044.8
-0.8	15.0	772344.5
-0.4	15.0	901394.4
0.0	15.0	936492.1
0.4	15.0	880421.6
0.8	15.0	766387.7
0.0	13.0	356622.5
0.0	13.5	473532.5
0.0	14.0	622117.9
0.0	14.5	880569.9
0.0	15.0	930400.4
0.0	15.5	901659.7
0.0	16.0	805820.9
0.0	16.5	548671.3
0.0	17.0	414362.1



2/11/2008 18:11:56 aligned for analyte Mn 257.610

X viewing position set to 0.0 mm having Peak intensity 930400.4 for Axial viewing  
Y viewing position set to 15.0 mm having Peak intensity 930400.4 for Axial viewing

Align View X Radial for analyte Mn 257.610

X-position	Y-position	Intensity
-7.0	15.0	1579.8
-6.5	15.0	1653.2
-6.0	15.0	1829.1
-5.5	15.0	2179.3
-5.0	15.0	3082.0
-4.5	15.0	4806.2
-4.0	15.0	8122.1
-3.5	15.0	12253.1
-3.0	15.0	16821.8
-2.5	15.0	19928.0
-2.0	15.0	22411.6

-1.5	15.0	22324.0
-1.0	15.0	20265.2
-0.5	15.0	26882.5
0.0	15.0	28870.1
0.5	15.0	24541.3
1.0	15.0	20069.5
1.5	15.0	13989.5
2.0	15.0	8881.1
2.5	15.0	5801.2
3.0	15.0	5144.2
3.5	15.0	4316.6
4.0	15.0	3324.1
4.5	15.0	2291.0
5.0	15.0	1541.7
5.5	15.0	1092.5
6.0	15.0	907.1
6.5	15.0	789.9
7.0	15.0	691.0

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2/11/2008 18:17:45 aligned for analyte Mn 257.610  
X viewing position set to 0.0 mm having Peak intensity 28870.1 for Radial viewing  
=====

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Analysis Begun

Start Time: 2/11/2008 18:37:56

Plasma On Time: 2/11/2008 17:48:54

Logged In Analyst: Charley Kay

Technique: ICP Continuous

Spectrometer Model: Optima 4300 DV, S/N 077N2121801 Autosampler Model: AS-93plus

Sample Information File: C:\pe\Charley Kay\Sample Information\080211.sif

Batch ID: 080211

Results Data Set: 080211

Results Library: C:\pe\Charley Kay\Results\Results.mdb  
=====

## Method Loaded

Method Name: 200.7&amp;6010\_070703

Method Last Saved: 2/5/2008 07:11:20

IEC File: 070703.iec

MSF File:

Method Description: 200.7/6010\_070703  
=====

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Al	Lin, Calc Int	Peak Area	Radial	Yr	Yes
As	Lin, Calc Int	Peak Area	Axial	Sca	Yes
B	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Ba	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Be	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Ca	Lin, Calc Int	Peak Area	Radial	Yr	Yes
Cd	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Co	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Cr	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Cu	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Fe	Lin, Calc Int	Peak Area	Radial	Yr	Yes
K	Lin, Calc Int	Peak Area	Radial	Yr	Yes
Mg	Lin, Calc Int	Peak Area	Radial	Yr	Yes
Mn	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Mo	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Na	Lin, Calc Int	Peak Area	Radial	Yr	Yes
Ni	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Pb	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Sb	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Se	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Tl	Lin, Calc Int	Peak Area	Axial	Sca	Yes
V	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Zn	Lin, Calc Int	Peak Area	Axial	Sca	Yes
Sca	Lin, Calc Int	Peak Area	Axial	n/a	n/a
Yr	Lin, Calc Int	Peak Area	Radial	n/a	n/a
Alx	Lin, Calc Int	Peak Area	Axial	Sca	No
Bex	Lin, Calc Int	Peak Area	Axial	Sca	No

Sequence No.: 1

Autosampler Location: 0

Sample ID: Calib Blank 1

Date Collected: 2/11/2008 18:38:13

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:  
=====

## Mean Data: Calib Blank 1

Analyte	Mean Corrected		RSD		Conc. Units
	Intensity	Std.Dev.	RSD		
Sca	501740.1	1342.74	0.27%		100 %
Yr	250593.0	2528.34	1.01%		100 %
Ag†	274.0	113.90	41.57%		[0.00] mg/L
Al†	41.2	0.05	0.13%		[0.00] mg/L
As†	6.0	1.72	28.78%		[0.00] mg/L
B †	146.7	3.72	2.54%		[0.00] mg/L
Ba†	1.1	4.03	362.92%		[0.00] mg/L
Be†	-4221.3	33.67	0.80%		[0.00] mg/L
Ca†	610.7	15.10	2.47%		[0.00] mg/L
Cd†	58.8	7.33	12.48%		[0.00] mg/L
Co†	-57.6	4.34	7.53%		[0.00] mg/L
Crt	290.9	10.06	3.46%		[0.00] mg/L



Sequence No.: 2  
 Sample ID: Standard 2  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 15  
 Date Collected: 2/11/2008 18:41:39  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: Standard 2

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sca	448260.8	807.89	0.18%	89.3	%
Yr	240623.1	1190.62	0.49%	96.0	%
Ag†	601190.2	2115.74	0.35%	{2}	mg/L
Al†	43707.7	7.76	0.02%	{10}	mg/L
B_†	163039.7	955.89	0.59%	{5.02}	mg/L
Ba†	739887.1	3235.65	0.44%	{10}	mg/L
Be†	12465944.3	116419.47	0.93%	{4.01}	mg/L
Cat	602446.6	940.08	0.16%	{100}	mg/L
Cdt	136907.7	487.10	0.36%	{5.01}	mg/L
Cot	261559.2	222.97	0.09%	{10}	mg/L
Crt	803452.5	2338.36	0.29%	{9.97}	mg/L
Cut	4148506.7	200.94	0.00%	{10}	mg/L
Fet	8224.6	12.10	0.15%	{9.98}	mg/L
K†	125182.5	255.78	0.20%	{100}	mg/L
Mgt	239616.1	211.06	0.09%	{100}	mg/L
Mnt	5764331.6	36131.01	0.63%	{10}	mg/L
Mot	124020.9	681.08	0.55%	{9.98}	mg/L
Nat	485673.7	3538.21	0.73%	{100}	mg/L
Nit	224018.9	818.99	0.37%	{10}	mg/L
Pbt	47728.0	194.26	0.41%	{10}	mg/L
V†	1786646.8	6596.47	0.37%	{10}	mg/L
Znt	469103.0	1874.81	0.40%	{10}	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag	1	Lin, Calc Int	0.0	300600	0.00000	1.000000	
Al	1	Lin, Calc Int	0.0	4371	0.00000	1.000000	
B_	1	Lin, Calc Int	0.0	32480	0.00000	1.000000	
Ba	1	Lin, Calc Int	0.0	73990	0.00000	1.000000	
Be	1	Lin, Calc Int	0.0	3109000	0.00000	1.000000	
Ca	1	Lin, Calc Int	0.0	6024	0.00000	1.000000	
Cd	1	Lin, Calc Int	0.0	27330	0.00000	1.000000	
Co	1	Lin, Calc Int	0.0	26160	0.00000	1.000000	
Cr	1	Lin, Calc Int	0.0	80590	0.00000	1.000000	
Cu	1	Lin, Calc Int	0.0	414900	0.00000	1.000000	
Fe	1	Lin, Calc Int	0.0	824.1	0.00000	1.000000	
K	1	Lin, Calc Int	-0.0	1252	0.00000	1.000000	
Mg	1	Lin, Calc Int	0.0	2396	0.00000	1.000000	
Mn	1	Lin, Calc Int	0.0	576400	0.00000	1.000000	
Mo	1	Lin, Calc Int	0.0	12430	0.00000	1.000000	
Na	1	Lin, Calc Int	0.0	4857	0.00000	1.000000	
Ni	1	Lin, Calc Int	0.0	22400	0.00000	1.000000	
Pb	1	Lin, Calc Int	0.0	4773	0.00000	1.000000	
V	1	Lin, Calc Int	0.0	178700	0.00000	1.000000	
Zn	1	Lin, Calc Int	0.0	46910	0.00000	1.000000	

Sequence No.: 3  
 Sample ID: ICV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 15  
 Date Collected: 2/11/2008 18:44:54  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Mean Data: ICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	446897.8	89.1	%	0.35			0.39%
Yr	237811.4	94.9	%	0.17			0.18%
Ag†	603183.4	2.01	mg/L	0.003	2.01 mg/L	0.003	0.17%
	QC value within limits for Ag	Recovery = 100.33%					
Al†	44411.4	10.2	mg/L	0.04	10.2 mg/L	0.04	0.41%
	QC value within limits for Al	Recovery = 101.61%					
B_†	165008.3	5.06	mg/L	0.003	5.06 mg/L	0.003	0.07%
	QC value within limits for B_	Recovery = 101.21%					
Ba†	740504.3	10.0	mg/L	0.05	10.0 mg/L	0.05	0.47%
	QC value within limits for Ba	Recovery = 100.08%					
Be†	12589723.1	4.05	mg/L	0.004	4.05 mg/L	0.004	0.10%
	QC value within limits for Be	Recovery = 101.25%					
Ca†	603989.8	100	mg/L	0.1	100 mg/L	0.1	0.10%
	QC value within limits for Ca	Recovery = 100.26%					
Cd†	137248.8	5.06	mg/L	0.025	5.06 mg/L	0.025	0.50%
	QC value within limits for Cd	Recovery = 101.23%					
Co†	261638.0	10.0	mg/L	0.04	10.0 mg/L	0.04	0.40%
	QC value within limits for Co	Recovery = 100.03%					
Cr†	803489.9	9.97	mg/L	0.023	9.97 mg/L	0.023	0.23%
	QC value within limits for Cr	Recovery = 99.70%					
Cu†	4185545.3	10.1	mg/L	0.15	10.1 mg/L	0.15	1.46%
	QC value within limits for Cu	Recovery = 100.99%					
Fe†	8440.7	10.2	mg/L	0.05	10.2 mg/L	0.05	0.51%
	QC value within limits for Fe	Recovery = 102.42%					
K†	125266.0	100	mg/L	1.1	100 mg/L	1.1	1.05%
	QC value within limits for K	Recovery = 100.07%					
Mg†	240892.6	101	mg/L	0.2	101 mg/L	0.2	0.23%
	QC value within limits for Mg	Recovery = 100.53%					
Mn†	5815372.2	10.1	mg/L	0.11	10.1 mg/L	0.11	1.13%
	QC value within limits for Mn	Recovery = 100.89%					
Mo†	123985.7	9.98	mg/L	0.029	9.98 mg/L	0.029	0.29%
	QC value within limits for Mo	Recovery = 99.77%					
Na†	485701.8	100	mg/L	0.7	100 mg/L	0.7	0.66%
	QC value within limits for Na	Recovery = 100.01%					
Ni†	224023.1	10.0	mg/L	0.02	10.0 mg/L	0.02	0.16%
	QC value within limits for Ni	Recovery = 100.00%					
Pb†	47678.2	9.99	mg/L	0.010	9.99 mg/L	0.010	0.10%
	QC value within limits for Pb	Recovery = 99.90%					
V†	1800755.7	10.1	mg/L	0.12	10.1 mg/L	0.12	1.17%
	QC value within limits for V	Recovery = 101.34%					
Zn†	469239.3	9.93	mg/L	0.028	9.93 mg/L	0.028	0.28%
	QC value within limits for Zn	Recovery = 99.35%					

All analyte(s) passed QC.

Sequence No.: 4  
 Sample ID: LINEARITY  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 9  
 Date Collected: 2/11/2008 18:48:09  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: LINEARITY

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	423381.5	84.4	%	0.25			0.30%
Yr	228475.1	91.2	%	0.20			0.22%
Ag†	-10838.3	-0.0361	mg/L	0.00003	-0.0361 mg/L	0.00003	0.08%
	QC value within limits for Ag Recovery = Not calculated						
Al†	-25.4	-0.00581	mg/L	0.004593	-0.00581 mg/L	0.004593	79.09%
	QC value within limits for Al Recovery = Not calculated						
B_†	1714.4	0.0528	mg/L	0.00539	0.0528 mg/L	0.00539	10.20%
	QC value within limits for B_ Recovery = Not calculated						
Ba†	133.1	0.00180	mg/L	0.000016	0.00180 mg/L	0.000016	0.89%
	QC value within limits for Ba Recovery = Not calculated						
Be†	-1335.0	-0.00043	mg/L	0.000033	-0.00043 mg/L	0.000033	7.64%
	QC value within limits for Be Recovery = Not calculated						
Ca†	1773461.2	294	mg/L	0.7	294 mg/L	0.7	0.25%
	QC value within limits for Ca Recovery = 98.13%						
Cd†	6.2	0.00024	mg/L	0.000226	0.00024 mg/L	0.000226	96.27%
	QC value within limits for Cd Recovery = Not calculated						
Co†	55.4	0.00212	mg/L	0.000312	0.00212 mg/L	0.000312	14.74%
	QC value within limits for Co Recovery = Not calculated						
Cr†	135.9	0.00169	mg/L	0.000083	0.00169 mg/L	0.000083	4.93%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	11568.0	0.0279	mg/L	0.00124	0.0279 mg/L	0.00124	4.46%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	83389.4	101	mg/L	0.7	101 mg/L	0.7	0.70%
	QC value within limits for Fe Recovery = 101.19%						
K†	391490.0	313	mg/L	0.6	313 mg/L	0.6	0.18%
	QC value within limits for K Recovery = 104.25%						
Mg†	459054.9	192	mg/L	0.3	192 mg/L	0.3	0.16%
	QC value within limits for Mg Recovery = Not calculated						
Mn†	1653.5	0.00287	mg/L	0.000072	0.00287 mg/L	0.000072	2.49%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	35.8	0.00288	mg/L	0.000874	0.00288 mg/L	0.000874	30.31%
	QC value within limits for Mo Recovery = Not calculated						
Na†	1468597.9	302	mg/L	0.7	302 mg/L	0.7	0.24%
	QC value within limits for Na Recovery = 100.79%						
Ni†	7.2	0.00032	mg/L	0.000263	0.00032 mg/L	0.000263	82.25%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	-11.4	-0.00239	mg/L	0.001062	-0.00239 mg/L	0.001062	44.40%
	QC value within limits for Pb Recovery = Not calculated						
V†	-495.1	-0.00276	mg/L	0.000096	-0.00276 mg/L	0.000096	3.47%
	QC value within limits for V Recovery = Not calculated						
Zn†	1487.8	0.0317	mg/L	0.00128	0.0317 mg/L	0.00128	4.03%
	QC value within limits for Zn Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 5  
 Sample ID: ICSEA  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 10  
 Date Collected: 2/11/2008 18:51:51  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICSEA

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	439264.5	87.5	%	0.23				0.26%
Yr	233987.2	93.4	%	0.31				0.33%
Ag†	-10596.6	-0.0353	mg/L	0.00010	-0.0353	mg/L	0.00010	0.27%
	QC value within limits for Ag Recovery = Not calculated							
Al†	1087853.3	249	mg/L	0.5	249	mg/L	0.5	0.20%
	QC value within limits for Al Recovery = 99.56%							
B_†	529.6	0.0163	mg/L	0.00189	0.0163	mg/L	0.00189	11.60%
	QC value within limits for B_ Recovery = Not calculated							
Ba†	172.7	0.00233	mg/L	0.000101	0.00233	mg/L	0.000101	4.32%
	QC value within limits for Ba Recovery = Not calculated							
Be†	-1310.0	-0.00042	mg/L	0.000025	-0.00042	mg/L	0.000025	6.03%
	QC value within limits for Be Recovery = Not calculated							
Ca†	1499566.5	249	mg/L	0.9	249	mg/L	0.9	0.34%
	QC value within limits for Ca Recovery = 99.57%							
Cd†	-10.8	-0.00039	mg/L	0.000243	-0.00039	mg/L	0.000243	61.84%
	QC value within limits for Cd Recovery = Not calculated							
Co†	21.3	0.00082	mg/L	0.000183	0.00082	mg/L	0.000183	22.51%
	QC value within limits for Co Recovery = Not calculated							
Cr†	-33.3	-0.00041	mg/L	0.000140	-0.00041	mg/L	0.000140	33.87%
	QC value within limits for Cr Recovery = Not calculated							
Cu†	10637.8	0.0256	mg/L	0.00065	0.0256	mg/L	0.00065	2.55%
	QC value within limits for Cu Recovery = Not calculated							
Fe†	82571.3	100	mg/L	0.1	100	mg/L	0.1	0.13%
	QC value within limits for Fe Recovery = 100.19%							
K†	281.9	0.225	mg/L	0.0406	0.225	mg/L	0.0406	18.03%
	QC value within limits for K Recovery = Not calculated							
Mg†	568188.8	237	mg/L	1.7	237	mg/L	1.7	0.73%
	QC value within limits for Mg Recovery = 94.85%							
Mn†	1977.6	0.00343	mg/L	0.000016	0.00343	mg/L	0.000016	0.48%
	QC value within limits for Mn Recovery = Not calculated							
Mo†	17.0	0.00137	mg/L	0.000895	0.00137	mg/L	0.000895	65.40%
	QC value within limits for Mo Recovery = Not calculated							
Na†	635.6	0.131	mg/L	0.0090	0.131	mg/L	0.0090	6.85%
	QC value within limits for Na Recovery = Not calculated							
Ni†	-12.9	-0.00058	mg/L	0.000252	-0.00058	mg/L	0.000252	43.73%
	QC value within limits for Ni Recovery = Not calculated							
Pb†	-165.8	-0.0347	mg/L	0.00058	-0.0347	mg/L	0.00058	1.67%
	QC value within limits for Pb Recovery = Not calculated							
V†	-545.1	-0.00305	mg/L	0.000000	-0.00305	mg/L	0.000000	0.00%
	QC value within limits for V Recovery = Not calculated							
Zn†	1131.9	0.0241	mg/L	0.00137	0.0241	mg/L	0.00137	5.69%
	QC value within limits for Zn Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 6  
 Sample ID: ICSAB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 11  
 Date Collected: 2/11/2008 18:55:33  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	439853.2	87.7%	0.41			0.47%
Yr	236452.2	94.4%	0.18			0.19%
Ag†	142019.3	0.472 mg/L	0.0014	0.472 mg/L	0.0014	0.29%
	QC value within limits for Ag	Recovery = 94.49%				
Al†	1082349.8	248 mg/L	1.3	248 mg/L	1.3	0.52%
	QC value within limits for Al	Recovery = 99.05%				
B_†	186.4	0.00526 mg/L	0.001957	0.00526 mg/L	0.001957	37.24%
	QC value within limits for B_	Recovery = Not calculated				
Ba†	19154.0	0.259 mg/L	0.0010	0.259 mg/L	0.0010	0.40%
	QC value within limits for Ba	Recovery = 103.55%				
Be†	767700.1	0.247 mg/L	0.0005	0.247 mg/L	0.0005	0.19%
	QC value within limits for Be	Recovery = 98.78%				
Ca†	1497545.4	249 mg/L	2.4	249 mg/L	2.4	0.95%
	QC value within limits for Ca	Recovery = 99.43%				
Cd†	13444.2	0.493 mg/L	0.0016	0.493 mg/L	0.0016	0.33%
	QC value within limits for Cd	Recovery = 98.58%				
Co†	6249.0	0.239 mg/L	0.0015	0.239 mg/L	0.0015	0.64%
	QC value within limits for Co	Recovery = 95.56%				
Cr†	19822.3	0.246 mg/L	0.0008	0.246 mg/L	0.0008	0.31%
	QC value within limits for Cr	Recovery = 98.39%				
Cu†	115756.4	0.279 mg/L	0.0018	0.279 mg/L	0.0018	0.63%
	QC value within limits for Cu	Recovery = 111.70%				
Fe†	82214.3	99.8 mg/L	0.05	99.8 mg/L	0.05	0.05%
	QC value within limits for Fe	Recovery = 99.76%				
K†	140.2	0.112 mg/L	0.0197	0.112 mg/L	0.0197	17.59%
	QC value within limits for K	Recovery = Not calculated				
Mg†	567543.7	237 mg/L	2.0	237 mg/L	2.0	0.86%
	QC value within limits for Mg	Recovery = 94.74%				
Mn†	150447.3	0.261 mg/L	0.0002	0.261 mg/L	0.0002	0.06%
	QC value within limits for Mn	Recovery = 104.40%				
Mo†	8.3	0.00066 mg/L	0.000536	0.00066 mg/L	0.000536	80.65%
	QC value within limits for Mo	Recovery = Not calculated				
Na†	410.2	0.0845 mg/L	0.00721	0.0845 mg/L	0.00721	8.53%
	QC value within limits for Na	Recovery = Not calculated				
Ni†	10507.9	0.469 mg/L	0.0005	0.469 mg/L	0.0005	0.11%
	QC value within limits for Ni	Recovery = 93.81%				
Pb†	2181.7	0.457 mg/L	0.0024	0.457 mg/L	0.0024	0.52%
	QC value within limits for Pb	Recovery = 91.42%				
V†	43639.7	0.246 mg/L	0.0001	0.246 mg/L	0.0001	0.05%
	QC value within limits for V	Recovery = 98.24%				
Zn†	25673.8	0.544 mg/L	0.0028	0.544 mg/L	0.0028	0.51%
	QC value within limits for Zn	Recovery = 108.82%				

All analyte(s) passed QC.

Sequence No.: 7  
 Sample ID: Wash  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/11/2008 18:59:17  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: Wash

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	499075.3	99.5	✓	0.86			0.86%
Yr	254373.0	102	✓	1.5			1.49%
Ag†	93.8	0.00031	mg/L	0.000268	0.00031 mg/L	0.000268	85.85%
	QC value within limits for Ag Recovery = Not calculated						
Al†	8.6	0.00197	mg/L	0.002526	0.00197 mg/L	0.002526	128.30%
	QC value within limits for Al Recovery = Not calculated						
B_†	281.8	0.00868	mg/L	0.000048	0.00868 mg/L	0.000048	0.56%
	QC value within limits for B_ Recovery = Not calculated						
Ba†	-2.3	-0.00003	mg/L	0.000118	-0.00003 mg/L	0.000118	388.95%
	QC value within limits for Ba Recovery = Not calculated						
Be†	42.7	0.00001	mg/L	0.000018	0.00001 mg/L	0.000018	132.75%
	QC value within limits for Be Recovery = Not calculated						
Ca†	-3.1	-0.00051	mg/L	0.001296	-0.00051 mg/L	0.001296	253.39%
	QC value within limits for Ca Recovery = Not calculated						
Cd†	3.3	0.00012	mg/L	0.000100	0.00012 mg/L	0.000100	82.52%
	QC value within limits for Cd Recovery = Not calculated						
Co†	0.5	0.00002	mg/L	0.000120	0.00002 mg/L	0.000120	614.28%
	QC value within limits for Co Recovery = Not calculated						
Cr†	0.9	0.00001	mg/L	0.000030	0.00001 mg/L	0.000030	264.06%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	467.4	0.00113	mg/L	0.000103	0.00113 mg/L	0.000103	9.16%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	5.7	0.00691	mg/L	0.000080	0.00691 mg/L	0.000080	1.15%
	QC value within limits for Fe Recovery = Not calculated						
K†	34.0	0.0272	mg/L	0.02252	0.0272 mg/L	0.02252	82.88%
	QC value within limits for K Recovery = Not calculated						
Mg†	-18.3	-0.00764	mg/L	0.001832	-0.00764 mg/L	0.001832	23.99%
	QC value within limits for Mg Recovery = Not calculated						
Mn†	-225.2	-0.00039	mg/L	0.000004	-0.00039 mg/L	0.000004	1.13%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	4.1	0.00033	mg/L	0.000149	0.00033 mg/L	0.000149	45.08%
	QC value within limits for Mo Recovery = Not calculated						
Na†	-22.7	-0.00468	mg/L	0.015995	-0.00468 mg/L	0.015995	341.57%
	QC value within limits for Na Recovery = Not calculated						
Ni†	4.2	0.00019	mg/L	0.000066	0.00019 mg/L	0.000066	34.88%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	10.0	0.00209	mg/L	0.000475	0.00209 mg/L	0.000475	22.66%
	QC value within limits for Pb Recovery = Not calculated						
V†	10.0	0.00006	mg/L	0.000292	0.00006 mg/L	0.000292	519.04%
	QC value within limits for V Recovery = Not calculated						
Zn†	15.8	0.00034	mg/L	0.000123	0.00034 mg/L	0.000123	36.76%
	QC value within limits for Zn Recovery = Not calculated						

All analyte(s) passed QC.

User canceled analysis.

=====  
Analysis Begun

Start Time: 2/11/2008 19:06:15                      Plasma On Time: 2/11/2008 17:48:54  
Logged In Analyst: Charley Kay                      Technique: ICP Continuous  
Spectrometer Model: Optima 4300 DV, S/N 077N2121801      Autosampler Model: AS-93plus

Sample Information File: C:\pe\Charley Kay\Sample Information\080211.sif  
Batch ID: 080211  
Results Data Set: 080211  
Results Library: C:\pe\Charley Kay\Results\Results.mdb

=====  
Sequence No.: 8    Autosampler Location: 12  
Sample ID: QC-25 lppm                                      Date Collected: 2/11/2008 19:06:16  
Analyst:    Data Type: Original  
Initial Sample Wt:    Initial Sample Vol:  
Dilution:    Sample Prep Vol:  
User canceled analysis.

=====  
Analysis Begun

Start Time: 2/11/2008 19:07:14                      Plasma On Time: 2/11/2008 17:48:54  
Logged In Analyst: Charley Kay                      Technique: ICP Continuous  
Spectrometer Model: Optima 4300 DV, S/N 077N2121801      Autosampler Model: AS-93plus

Sample Information File: C:\pe\Charley Kay\Sample Information\080211.sif  
Batch ID: 080211  
Results Data Set: 080211  
Results Library: C:\pe\Charley Kay\Results\Results.mdb

=====  
Sequence No.: 8    Autosampler Location: 12  
Sample ID: QC-25 lppm                                      Date Collected: 2/11/2008 19:07:14  
Analyst:    Data Type: Original  
Initial Sample Wt:    Initial Sample Vol:  
Dilution:    Sample Prep Vol:  
User canceled analysis.

=====  
Analysis Begun

Start Time: 2/11/2008 19:07:46                      Plasma On Time: 2/11/2008 17:48:54  
Logged In Analyst: Charley Kay                      Technique: ICP Continuous  
Spectrometer Model: Optima 4300 DV, S/N 077N2121801      Autosampler Model: AS-93plus

Sample Information File: C:\pe\Charley Kay\Sample Information\080211.sif  
Batch ID: 080211  
Results Data Set: 080211  
Results Library: C:\pe\Charley Kay\Results\Results.mdb

=====  
Sequence No.: 8    Autosampler Location: 12  
Sample ID: QC-25 lppm                                      Date Collected: 2/11/2008 19:07:46  
Analyst:    Data Type: Original  
Initial Sample Wt:    Initial Sample Vol:  
Dilution:    Sample Prep Vol:  
User canceled analysis.





=====  
Analysis Begun

Start Time: 2/11/2008 19:12:45                      Plasma On Time: 2/11/2008 17:48:54  
Logged In Analyst: Charley Kay                      Technique: ICP Continuous  
Spectrometer Model: Optima 4300 DV, S/N 077N2121801 Autosampler Model: AS-93plus

Sample Information File: C:\pe\Charley Kay\Sample Information\080211.sif  
Batch ID: 080211  
Results Data Set: 080211  
Results Library: C:\pe\Charley Kay\Results\Results.mdb

=====  
Sequence No.: 1                                      Autosampler Location: 15  
Sample ID: ICV                                      Date Collected: 2/11/2008 19:12:45  
Analyst:    Data Type: Original  
Initial Sample Wt:                                Initial Sample Vol:  
Dilution:                                         Sample Prep Vol:  
User canceled analysis.



Mnt	622180.7	1.08 mg/L	0.004	1.08 mg/L	0.004	0.37%
	QC value within limits for Mn	Recovery = 107.94%				
Mot	12326.8	0.992 mg/L	0.0074	0.992 mg/L	0.0074	0.74%
	QC value within limits for Mo	Recovery = 99.19%				
Na+	4640.6	0.955 mg/L	0.0208	0.955 mg/L	0.0208	2.18%
	QC value within limits for Na	Recovery = 95.55%				
Nit	24467.3	1.09 mg/L	0.000	1.09 mg/L	0.000	0.01%
	QC value within limits for Ni	Recovery = 109.22%				
Pbt	5133.5	1.08 mg/L	0.004	1.08 mg/L	0.004	0.36%
	QC value within limits for Pb	Recovery = 107.56%				
V+	177824.2	1.00 mg/L	0.004	1.00 mg/L	0.004	0.38%
	QC value within limits for V	Recovery = 100.09%				
Znt	50275.6	1.06 mg/L	0.001	1.06 mg/L	0.001	0.07%
	QC value within limits for Zn	Recovery = 106.43%				

All analyte(s) passed QC.

Sequence No.: 9  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 2/11/2008 19:18:14  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	462076.6	92.1	%	0.42			0.45%
Yr	244409.4	97.5	%	0.95			0.97%
Ag†	301622.6	1.00	mg/L	0.006	1.00 mg/L	0.006	0.59%
	QC value within limits for Ag	Recovery = 100.34%					
Al†	21992.4	5.03	mg/L	0.092	5.03 mg/L	0.092	1.83%
	QC value within limits for Al	Recovery = 100.63%					
B_†	84241.0	2.58	mg/L	0.022	2.58 mg/L	0.022	0.84%
	QC value within limits for B_	Recovery = 103.33%					
Ba†	386421.8	5.22	mg/L	0.023	5.22 mg/L	0.023	0.44%
	QC value within limits for Ba	Recovery = 104.45%					
Be†	6655950.9	2.14	mg/L	0.006	2.14 mg/L	0.006	0.30%
	QC value within limits for Be	Recovery = 107.05%					
Ca†	310717.0	51.6	mg/L	0.05	51.6 mg/L	0.05	0.10%
	QC value within limits for Ca	Recovery = 103.15%					
Cd†	56578.4	2.09	mg/L	0.013	2.09 mg/L	0.013	0.62%
	QC value within limits for Cd	Recovery = 104.54%					
Co†	137657.6	5.26	mg/L	0.041	5.26 mg/L	0.041	0.78%
	QC value within limits for Co	Recovery = 105.26%					
Cr†	420634.5	5.22	mg/L	0.034	5.22 mg/L	0.034	0.66%
	QC value within limits for Cr	Recovery = 104.39%					
Cu†	2164918.3	5.22	mg/L	0.002	5.22 mg/L	0.002	0.04%
	QC value within limits for Cu	Recovery = 104.47%					
Fe†	4361.2	5.29	mg/L	0.048	5.29 mg/L	0.048	0.91%
	QC value within limits for Fe	Recovery = 105.84%					
K†	61826.8	49.4	mg/L	0.41	49.4 mg/L	0.41	0.83%
	QC value within limits for K	Recovery = 98.78%					
Mg†	123211.2	51.4	mg/L	0.09	51.4 mg/L	0.09	0.18%
	QC value within limits for Mg	Recovery = 102.84%					
Mn†	3066833.8	5.32	mg/L	0.012	5.32 mg/L	0.012	0.23%
	QC value within limits for Mn	Recovery = 106.41%					
Mo†	63943.5	5.15	mg/L	0.050	5.15 mg/L	0.050	0.97%
	QC value within limits for Mo	Recovery = 102.91%					
Na†	242801.1	50.0	mg/L	0.43	50.0 mg/L	0.43	0.87%
	QC value within limits for Na	Recovery = 99.99%					
Ni†	118619.9	5.30	mg/L	0.042	5.30 mg/L	0.042	0.80%
	QC value within limits for Ni	Recovery = 105.90%					
Pb†	25236.0	5.29	mg/L	0.051	5.29 mg/L	0.051	0.97%
	QC value within limits for Pb	Recovery = 105.75%					
V†	925039.1	5.21	mg/L	0.002	5.21 mg/L	0.002	0.04%
	QC value within limits for V	Recovery = 104.13%					
Zn†	250811.7	5.31	mg/L	0.040	5.31 mg/L	0.040	0.75%
	QC value within limits for Zn	Recovery = 106.21%					

All analyte(s) passed QC.

Sequence No.: 10  
 Sample ID: ICB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/11/2008 19:21:27  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	492815.8	98.2	%	0.09			0.09%
Yr	253034.1	101	%	0.7			0.72%
Ag†	80.4	0.00027	mg/L	0.000039	0.00027 mg/L	0.000039	14.40%
	QC value within limits for Ag Recovery = Not calculated						
Al†	-5.9	-0.00135	mg/L	0.001510	-0.00135 mg/L	0.001510	112.13%
	QC value within limits for Al Recovery = Not calculated						
B_†	789.0	0.0243	mg/L	0.00108	0.0243 mg/L	0.00108	4.45%
	QC value greater than the upper limit for B_ Recovery = Not calculated						
Ba†	-13.7	-0.00019	mg/L	0.000054	-0.00019 mg/L	0.000054	28.98%
	QC value within limits for Ba Recovery = Not calculated						
Be†	-114.5	-0.00004	mg/L	0.000007	-0.00004 mg/L	0.000007	17.72%
	QC value within limits for Be Recovery = Not calculated						
Ca†	-46.2	-0.00766	mg/L	0.000724	-0.00766 mg/L	0.000724	9.45%
	QC value within limits for Ca Recovery = Not calculated						
Cd†	6.6	0.00024	mg/L	0.000054	0.00024 mg/L	0.000054	22.44%
	QC value within limits for Cd Recovery = Not calculated						
Co†	0.8	0.00003	mg/L	0.000064	0.00003 mg/L	0.000064	210.93%
	QC value within limits for Co Recovery = Not calculated						
Cr†	-0.2	0.00000	mg/L	0.000097	0.00000 mg/L	0.000097	>999.9%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	14.4	0.00003	mg/L	0.000013	0.00003 mg/L	0.000013	38.70%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	5.3	0.00644	mg/L	0.002799	0.00644 mg/L	0.002799	43.46%
	QC value within limits for Fe Recovery = Not calculated						
K†	8.9	0.00711	mg/L	0.007686	0.00711 mg/L	0.007686	108.12%
	QC value within limits for K Recovery = Not calculated						
Mg†	-29.7	-0.0124	mg/L	0.00000	-0.0124 mg/L	0.00000	0.04%
	QC value within limits for Mg Recovery = Not calculated						
Mn†	-166.4	-0.00029	mg/L	0.000042	-0.00029 mg/L	0.000042	14.41%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	21.5	0.00173	mg/L	0.000190	0.00173 mg/L	0.000190	10.96%
	QC value within limits for Mo Recovery = Not calculated						
Na†	-11.8	-0.00243	mg/L	0.009829	-0.00243 mg/L	0.009829	404.38%
	QC value within limits for Na Recovery = Not calculated						
Ni†	3.4	0.00015	mg/L	0.000037	0.00015 mg/L	0.000037	24.21%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	2.7	0.00057	mg/L	0.001443	0.00057 mg/L	0.001443	250.88%
	QC value within limits for Pb Recovery = Not calculated						
V†	-75.3	-0.00042	mg/L	0.000095	-0.00042 mg/L	0.000095	22.64%
	QC value within limits for V Recovery = Not calculated						
Zn†	-59.7	-0.00127	mg/L	0.000133	-0.00127 mg/L	0.000133	10.48%
	QC value within limits for Zn Recovery = Not calculated						
	QC Failed. Retry.						

Sequence No.: 11  
 Sample ID: ICB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/11/2008 19:24:00  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	495115.1	98.7	%	0.09			0.09%
Yr	250356.9	99.9	%	1.26			1.26%
Ag†	102.5	0.00034	mg/L	0.000041	0.00034 mg/L	0.000041	12.10%
	QC value within limits for Ag Recovery = Not calculated						
Al†	23.2	0.00530	mg/L	0.001526	0.00530 mg/L	0.001526	28.79%

B_†	QC value within limits for Al	563.6	Recovery = Not calculated	0.0174 mg/L	0.00022	0.0174 mg/L	0.00022	1.28%
Bat	QC value within limits for B_	-11.6	Recovery = Not calculated	-0.00016 mg/L	0.000026	-0.00016 mg/L	0.000026	16.90%
Bet	QC value within limits for Ba	-67.1	Recovery = Not calculated	-0.00002 mg/L	0.000025	-0.00002 mg/L	0.000025	115.19%
Cat	QC value within limits for Be	-38.9	Recovery = Not calculated	-0.00646 mg/L	0.000425	-0.00646 mg/L	0.000425	6.57%
Cdt	QC value within limits for Ca	2.6	Recovery = Not calculated	0.00009 mg/L	0.000037	0.00009 mg/L	0.000037	39.43%
Cot	QC value within limits for Cd	-6.4	Recovery = Not calculated	-0.00025 mg/L	0.000116	-0.00025 mg/L	0.000116	46.99%
Crt	QC value within limits for Co	0.6	Recovery = Not calculated	0.00001 mg/L	0.000063	0.00001 mg/L	0.000063	827.75%
Cut	QC value within limits for Cr	38.7	Recovery = Not calculated	0.00009 mg/L	0.000009	0.00009 mg/L	0.000009	9.77%
Fet	QC value within limits for Cu	5.9	Recovery = Not calculated	0.00717 mg/L	0.000239	0.00717 mg/L	0.000239	3.33%
K†	QC value within limits for Fe	19.2	Recovery = Not calculated	0.0153 mg/L	0.00452	0.0153 mg/L	0.00452	29.47%
Mgt	QC value within limits for K	-36.5	Recovery = Not calculated	-0.0152 mg/L	0.00037	-0.0152 mg/L	0.00037	2.42%
Mnt	QC value within limits for Mg	-188.7	Recovery = Not calculated	-0.00033 mg/L	0.000030	-0.00033 mg/L	0.000030	9.08%
Mot	QC value within limits for Mn	7.8	Recovery = Not calculated	0.00063 mg/L	0.000347	0.00063 mg/L	0.000347	55.09%
Nat	QC value within limits for Mo	-45.1	Recovery = Not calculated	-0.00928 mg/L	0.008581	-0.00928 mg/L	0.008581	92.48%
Nit	QC value within limits for Na	3.9	Recovery = Not calculated	0.00017 mg/L	0.000018	0.00017 mg/L	0.000018	10.49%
Pbt	QC value within limits for Ni	2.4	Recovery = Not calculated	0.00050 mg/L	0.000533	0.00050 mg/L	0.000533	106.12%
V†	QC value within limits for Pb	18.2	Recovery = Not calculated	0.00010 mg/L	0.000424	0.00010 mg/L	0.000424	417.55%
Znt	QC value within limits for V	-60.6	Recovery = Not calculated	-0.00129 mg/L	0.000042	-0.00129 mg/L	0.000042	3.21%
	QC value within limits for Zn		Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 12  
 Sample ID: MRL  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 20  
 Date Collected: 2/11/2008 19:27:23  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	506103.8	101	%	0.0			0.04%
Yr	255663.7	102	%	0.1			0.10%
Ag†	3013.5	0.0100	mg/L	0.00004	0.0100 mg/L	0.00004	0.37%
	QC value within limits for Ag Recovery = 100.25%						
Al†	205.1	0.0469	mg/L	0.00691	0.0469 mg/L	0.00691	14.74%
	QC value within limits for Al Recovery = 93.84%						
B_†	1993.8	0.0613	mg/L	0.00035	0.0613 mg/L	0.00035	0.57%
	QC value within limits for B_ Recovery = 122.57%						
Ba†	1509.0	0.0204	mg/L	0.00006	0.0204 mg/L	0.00006	0.30%
	QC value within limits for Ba Recovery = 101.98%						
Be†	3156.6	0.00102	mg/L	0.000022	0.00102 mg/L	0.000022	2.20%
	QC value within limits for Be Recovery = 101.54%						
Ca†	6167.4	1.02	mg/L	0.005	1.02 mg/L	0.005	0.53%
	QC value within limits for Ca Recovery = 102.37%						
Cd†	165.8	0.00627	mg/L	0.000048	0.00627 mg/L	0.000048	0.77%
	QC value within limits for Cd Recovery = 125.35%						
Co†	1355.7	0.0518	mg/L	0.00007	0.0518 mg/L	0.00007	0.14%
	QC value within limits for Co Recovery = 103.66%						
Cr†	814.4	0.0101	mg/L	0.00003	0.0101 mg/L	0.00003	0.26%
	QC value within limits for Cr Recovery = 101.05%						
Cu†	4074.4	0.00987	mg/L	0.000311	0.00987 mg/L	0.000311	3.16%
	QC value within limits for Cu Recovery = 98.70%						
Fe†	20.7	0.0251	mg/L	0.00486	0.0251 mg/L	0.00486	19.37%
	QC value within limits for Fe Recovery = 125.57%						
K†	1209.7	0.966	mg/L	0.0192	0.966 mg/L	0.0192	1.99%
	QC value within limits for K Recovery = 96.64%						
Mg†	213.5	0.0891	mg/L	0.00020	0.0891 mg/L	0.00020	0.22%
	QC value within limits for Mg Recovery = 89.10%						
Mn†	1041.8	0.00181	mg/L	0.000024	0.00181 mg/L	0.000024	1.35%
	QC value within limits for Mn Recovery = 90.37%						
Mo†	250.4	0.0202	mg/L	0.00022	0.0202 mg/L	0.00022	1.09%
	QC value within limits for Mo Recovery = 100.75%						
Na†	4685.0	0.965	mg/L	0.0148	0.965 mg/L	0.0148	1.53%
	QC value within limits for Na Recovery = 96.46%						
Ni†	476.2	0.0213	mg/L	0.00002	0.0213 mg/L	0.00002	0.09%
	QC value within limits for Ni Recovery = 106.29%						
Pb†	95.9	0.0201	mg/L	0.00071	0.0201 mg/L	0.00071	3.52%
	QC value within limits for Pb Recovery = 100.41%						
V†	344.6	0.00198	mg/L	0.000006	0.00198 mg/L	0.000006	0.32%
	QC value within limits for V Recovery = 99.23%						
Zn†	957.7	0.0203	mg/L	0.00017	0.0203 mg/L	0.00017	0.65%
	QC value within limits for Zn Recovery = 101.36%						

All analyte(s) passed QC.

Sequence No.: 13  
 Sample ID: MRL/2  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 16  
 Date Collected: 2/11/2008 19:30:59  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MRL/2

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	491311.5	97.9	%	0.36				0.36%
Yr	250907.3	100	%	0.2				0.18%
Agf	1564.8	0.00521	mg/L	0.000216	0.00521	mg/L	0.000216	4.15%
Alf	105.7	0.0242	mg/L	0.00622	0.0242	mg/L	0.00622	25.74%
B_t	1213.3	0.0373	mg/L	0.00013	0.0373	mg/L	0.00013	0.34%
Baf	769.0	0.0104	mg/L	0.00002	0.0104	mg/L	0.00002	0.16%
Bef	1505.9	0.00048	mg/L	0.000005	0.00048	mg/L	0.000005	0.96%
Ca†	3119.1	0.518	mg/L	0.0065	0.518	mg/L	0.0065	1.26%
Cdf	90.0	0.00340	mg/L	0.000038	0.00340	mg/L	0.000038	1.12%
Cof	691.0	0.0264	mg/L	0.00027	0.0264	mg/L	0.00027	1.04%
Crf	415.9	0.00516	mg/L	0.000002	0.00516	mg/L	0.000002	0.03%
Cuf	2056.6	0.00498	mg/L	0.000011	0.00498	mg/L	0.000011	0.22%
Fef	11.7	0.0143	mg/L	0.00429	0.0143	mg/L	0.00429	30.11%
K†	617.9	0.494	mg/L	0.0134	0.494	mg/L	0.0134	2.72%
Mgf	84.8	0.0354	mg/L	0.00221	0.0354	mg/L	0.00221	6.25%
Mnf	430.2	0.00075	mg/L	0.000026	0.00075	mg/L	0.000026	3.50%
Mof	130.8	0.0105	mg/L	0.00013	0.0105	mg/L	0.00013	1.25%
Naf	2364.3	0.487	mg/L	0.0035	0.487	mg/L	0.0035	0.72%
Nif	243.9	0.0109	mg/L	0.00003	0.0109	mg/L	0.00003	0.28%
Pbf	44.7	0.00937	mg/L	0.000262	0.00937	mg/L	0.000262	2.80%
V†	188.1	0.00108	mg/L	0.000221	0.00108	mg/L	0.000221	20.48%
Znf	556.2	0.0118	mg/L	0.00015	0.0118	mg/L	0.00015	1.29%



Sequence No.: 14  
 Sample ID: MRL/5  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 17  
 Date Collected: 2/11/2008 19:34:35  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MRL/5

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	494577.0	98.6	%	0.43				0.44%
Yr	252973.0	101	%	0.1				0.06%
Ag†	692.6	0.00230	mg/L	0.000674	0.00230	mg/L	0.000674	29.27%
Al†	32.6	0.00745	mg/L	0.006676	0.00745	mg/L	0.006676	89.62%
B_†	708.1	0.0218	mg/L	0.00016	0.0218	mg/L	0.00016	0.74%
Ba†	295.8	0.00400	mg/L	0.000081	0.00400	mg/L	0.000081	2.04%
Be†	514.2	0.00017	mg/L	0.000029	0.00017	mg/L	0.000029	17.49%
Ca†	1244.3	0.207	mg/L	0.0026	0.207	mg/L	0.0026	1.24%
Cd†	33.9	0.00128	mg/L	0.000022	0.00128	mg/L	0.000022	1.69%
Co†	275.5	0.0105	mg/L	0.00019	0.0105	mg/L	0.00019	1.83%
Cr†	170.2	0.00211	mg/L	0.000002	0.00211	mg/L	0.000002	0.09%
Cu†	754.1	0.00183	mg/L	0.000076	0.00183	mg/L	0.000076	4.13%
Fe†	6.7	0.00807	mg/L	0.002791	0.00807	mg/L	0.002791	34.58%
K†	178.0	0.142	mg/L	0.0023	0.142	mg/L	0.0023	1.61%
Mg†	17.7	0.00737	mg/L	0.000671	0.00737	mg/L	0.000671	9.10%
Mn†	50.3	0.00009	mg/L	0.000041	0.00009	mg/L	0.000041	46.99%
Mo†	54.1	0.00435	mg/L	0.000002	0.00435	mg/L	0.000002	0.05%
Na†	917.9	0.189	mg/L	0.0018	0.189	mg/L	0.0018	0.95%
Ni†	105.7	0.00472	mg/L	0.000086	0.00472	mg/L	0.000086	1.82%
Pb†	21.9	0.00458	mg/L	0.001192	0.00458	mg/L	0.001192	26.02%
V†	79.3	0.00046	mg/L	0.000039	0.00046	mg/L	0.000039	8.49%
Zn†	204.0	0.00432	mg/L	0.000049	0.00432	mg/L	0.000049	1.15%

Sequence No.: 15  
 Sample ID: FILTERCHECK  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 18  
 Date Collected: 2/11/2008 19:38:11  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: FILTERCHECK

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	493280.9	98.3	✓	0.50				0.51%
Yr	254567.4	102	✓	0.1				0.08%
Ag†	6.3	0.00002	mg/L	0.000085	0.00002	mg/L	0.000085	401.51%
Al†	-20.6	-0.00470	mg/L	0.005049	-0.00470	mg/L	0.005049	107.35%
B_†	368.7	0.0114	mg/L	0.00015	0.0114	mg/L	0.00015	1.30%
Ba†	-15.7	-0.00021	mg/L	0.000028	-0.00021	mg/L	0.000028	13.05%
Be†	-125.0	-0.00004	mg/L	0.000003	-0.00004	mg/L	0.000003	6.52%
Ca†	-47.7	-0.00792	mg/L	0.001387	-0.00792	mg/L	0.001387	17.51%
Cd†	1.7	0.00006	mg/L	0.000027	0.00006	mg/L	0.000027	43.97%
Co†	-3.1	-0.00012	mg/L	0.000074	-0.00012	mg/L	0.000074	61.52%
Cr†	8.9	0.00011	mg/L	0.000000	0.00011	mg/L	0.000000	0.28%
Cu†	-64.0	-0.00015	mg/L	0.000060	-0.00015	mg/L	0.000060	38.57%
Fe†	3.0	0.00362	mg/L	0.002373	0.00362	mg/L	0.002373	65.47%
K†	-12.9	-0.0103	mg/L	0.03205	-0.0103	mg/L	0.03205	309.81%
Mg†	-38.4	-0.0160	mg/L	0.00072	-0.0160	mg/L	0.00072	4.50%
Mn†	-180.0	-0.00031	mg/L	0.000008	-0.00031	mg/L	0.000008	2.54%
Mo†	1.6	0.00013	mg/L	0.000616	0.00013	mg/L	0.000616	492.09%
Na†	-48.2	-0.00993	mg/L	0.001166	-0.00993	mg/L	0.001166	11.74%
Ni†	1.5	0.00007	mg/L	0.000012	0.00007	mg/L	0.000012	18.26%
Pb†	-0.1	-0.00001	mg/L	0.000483	-0.00001	mg/L	0.000483	>999.9%
V†	6.2	0.00004	mg/L	0.000152	0.00004	mg/L	0.000152	429.01%
Zn†	-67.7	-0.00144	mg/L	0.000043	-0.00144	mg/L	0.000043	2.98%

Sequence No.: 56  
 Sample ID: MBLANK  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 65  
 Date Collected: 2/11/2008 22:32:15  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MBLANK

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	493100.8	98.3	%	0.67				0.68%
Yr	249816.7	99.7	%	0.97				0.97%
Ag†	73.5	0.00024	mg/L	0.000139	0.00024	mg/L	0.000139	56.70%
Al†	-3.6	-0.00083	mg/L	0.002149	-0.00083	mg/L	0.002149	257.87%
B_†	513.8	0.0158	mg/L	0.00046	0.0158	mg/L	0.00046	2.89%
Ba†	-21.2	-0.00029	mg/L	0.000024	-0.00029	mg/L	0.000024	8.39%
Be†	-97.6	-0.00003	mg/L	0.000024	-0.00003	mg/L	0.000024	77.93%
Ca†	-56.5	-0.00937	mg/L	0.001184	-0.00937	mg/L	0.001184	12.63%
Cd†	-0.7	-0.00003	mg/L	0.000149	-0.00003	mg/L	0.000149	546.07%
Co†	-0.7	-0.00003	mg/L	0.000099	-0.00003	mg/L	0.000099	369.81%
Cr†	2.3	0.00003	mg/L	0.000055	0.00003	mg/L	0.000055	193.20%
Cu†	-404.8	-0.00098	mg/L	0.000066	-0.00098	mg/L	0.000066	6.76%
Fe†	-0.4	-0.00047	mg/L	0.000263	-0.00047	mg/L	0.000263	56.43%
K†	-1.3	-0.00101	mg/L	0.014642	-0.00101	mg/L	0.014642	>999.9%
Mg†	-58.8	-0.0245	mg/L	0.00104	-0.0245	mg/L	0.00104	4.22%
Mn†	-299.5	-0.00052	mg/L	0.000010	-0.00052	mg/L	0.000010	1.92%
Mo†	2.7	0.00022	mg/L	0.000289	0.00022	mg/L	0.000289	130.71%
Na†	75.0	0.0154	mg/L	0.01857	0.0154	mg/L	0.01857	120.26%
Ni†	3.6	0.00016	mg/L	0.000117	0.00016	mg/L	0.000117	73.38%
Pb†	-13.5	-0.00283	mg/L	0.000008	-0.00283	mg/L	0.000008	0.29%
V†	-47.4	-0.00026	mg/L	0.000254	-0.00026	mg/L	0.000254	96.08%
Zn†	-110.1	-0.00235	mg/L	0.000183	-0.00235	mg/L	0.000183	7.77%

Sequence No.: 57  
 Sample ID: MRL  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 21  
 Date Collected: 2/11/2008 22:35:53  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MRL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sca	495742.5	98.8	%	1.54			1.56%
Yr	252435.7	101	%	0.3			0.31%
Ag†	3041.2	0.0101	mg/L	0.00021	0.0101 mg/L	0.00021	2.07%
Al†	200.9	0.0460	mg/L	0.00153	0.0460 mg/L	0.00153	3.32%
B†	2024.0	0.0622	mg/L	0.00069	0.0622 mg/L	0.00069	1.11%
Ba†	1530.5	0.0207	mg/L	0.00031	0.0207 mg/L	0.00031	1.50%
Be†	3222.9	0.00104	mg/L	0.000017	0.00104 mg/L	0.000017	1.66%
Ca†	6062.4	1.01	mg/L	0.006	1.01 mg/L	0.006	0.58%
Cd†	162.5	0.00615	mg/L	0.000032	0.00615 mg/L	0.000032	0.52%
Co†	1365.5	0.0522	mg/L	0.00082	0.0522 mg/L	0.00082	1.57%
Cr†	824.9	0.0102	mg/L	0.00032	0.0102 mg/L	0.00032	3.10%
Cu†	3732.5	0.00905	mg/L	0.000325	0.00905 mg/L	0.000325	3.59%
Fe†	18.4	0.0224	mg/L	0.00150	0.0224 mg/L	0.00150	6.70%
K†	1208.3	0.965	mg/L	0.0004	0.965 mg/L	0.0004	0.04%
Mg†	190.6	0.0795	mg/L	0.00055	0.0795 mg/L	0.00055	0.69%
Mn†	975.4	0.00169	mg/L	0.000040	0.00169 mg/L	0.000040	2.35%
Mo†	252.3	0.0203	mg/L	0.00044	0.0203 mg/L	0.00044	2.17%
Na†	4815.6	0.992	mg/L	0.0137	0.992 mg/L	0.0137	1.38%
Ni†	476.8	0.0213	mg/L	0.00019	0.0213 mg/L	0.00019	0.89%
Pb†	87.6	0.0184	mg/L	0.00105	0.0184 mg/L	0.00105	5.71%
V†	317.0	0.00183	mg/L	0.000030	0.00183 mg/L	0.000030	1.64%
Zn†	858.9	0.0182	mg/L	0.00048	0.0182 mg/L	0.00048	2.67%

Sequence No.: 58  
 Sample ID: LCS  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 66  
 Date Collected: 2/11/2008 22:39:29  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Mean Data: LCS

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc. Units			Conc. Units	Units		
Sca	464846.4	92.6 <del>%</del>		0.22				0.24%
Yr	245112.6	97.8 <del>%</del>		0.39				0.40%
Ag†	142647.1	0.475 mg/L		0.0003	0.475 mg/L		0.0003	0.06%
Al†	8322.7	1.90 mg/L		0.010	1.90 mg/L		0.010	0.53%
B_†	16182.5	0.496 mg/L		0.0059	0.496 mg/L		0.0059	1.19%
Ba†	74600.7	1.01 mg/L		0.011	1.01 mg/L		0.011	1.06%
Be†	160708.5	0.0517 mg/L		0.00004	0.0517 mg/L		0.00004	0.08%
Ca†	305963.2	50.8 mg/L		0.28	50.8 mg/L		0.28	0.54%
Cd†	5601.6	0.209 mg/L		0.0011	0.209 mg/L		0.0011	0.53%
Co†	26616.9	1.02 mg/L		0.013	1.02 mg/L		0.013	1.29%
Cr†	81111.6	1.01 mg/L		0.012	1.01 mg/L		0.012	1.24%
Cur	415079.2	1.00 mg/L		0.000	1.00 mg/L		0.000	0.04%
Fe†	4115.2	4.99 mg/L		0.007	4.99 mg/L		0.007	0.13%
K†	24610.5	19.7 mg/L		0.03	19.7 mg/L		0.03	0.15%
Mg†	48054.3	20.1 mg/L		0.07	20.1 mg/L		0.07	0.36%
Mn†	298621.9	0.518 mg/L		0.0010	0.518 mg/L		0.0010	0.19%
Mo†	12343.4	0.993 mg/L		0.0089	0.993 mg/L		0.0089	0.89%
Na†	238355.6	49.1 mg/L		0.06	49.1 mg/L		0.06	0.11%
Ni†	11465.9	0.512 mg/L		0.0072	0.512 mg/L		0.0072	1.41%
Pb†	5023.8	1.05 mg/L		0.015	1.05 mg/L		0.015	1.38%
V†	177505.9	0.999 mg/L		0.0006	0.999 mg/L		0.0006	0.06%
Zn†	48804.4	1.04 mg/L		0.008	1.04 mg/L		0.008	0.79%

Sequence No.: 59  
 Sample ID: LCSD  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 67  
 Date Collected: 2/11/2008 22:42:35  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: LCSD

Analyte	Mean Corrected		Calib.		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Sca	467553.1	93.2	%	0.16			0.17%
Yr	243637.5	97.2	%	1.72			1.77%
Ag†	144868.5	0.482	mg/L	0.0006	0.482	mg/L	0.13%
Al†	8637.6	1.98	mg/L	0.029	1.98	mg/L	1.47%
B_†	16438.6	0.504	mg/L	0.0015	0.504	mg/L	0.29%
Ba†	75494.4	1.02	mg/L	0.001	1.02	mg/L	0.05%
Be†	163577.4	0.0526	mg/L	0.00008	0.0526	mg/L	0.15%
Ca†	307546.8	51.0	mg/L	0.18	51.0	mg/L	0.34%
Cd†	5637.3	0.210	mg/L	0.0010	0.210	mg/L	0.47%
Co†	26995.5	1.03	mg/L	0.000	1.03	mg/L	0.04%
Cr†	81235.1	1.01	mg/L	0.001	1.01	mg/L	0.11%
Cu†	422801.7	1.02	mg/L	0.003	1.02	mg/L	0.26%
Fe†	4280.9	5.19	mg/L	0.048	5.19	mg/L	0.93%
K†	25140.7	20.1	mg/L	0.34	20.1	mg/L	1.72%
Mg†	49169.6	20.5	mg/L	0.23	20.5	mg/L	1.11%
Mn†	303348.8	0.526	mg/L	0.0012	0.526	mg/L	0.23%
Mo†	12507.8	1.01	mg/L	0.003	1.01	mg/L	0.26%
Na†	238613.7	49.1	mg/L	0.21	49.1	mg/L	0.43%
Ni†	11610.8	0.518	mg/L	0.0040	0.518	mg/L	0.77%
Pb†	4896.1	1.03	mg/L	0.000	1.03	mg/L	0.01%
V†	180480.0	1.02	mg/L	0.000	1.02	mg/L	0.01%
Zn†	49483.3	1.05	mg/L	0.000	1.05	mg/L	0.04%

Sequence No.: 60  
 Sample ID: 2802080108  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 68  
 Date Collected: 2/11/2008 22:45:40  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 2802080108

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	498803.3	99.4	%	0.15				0.15%
Yr	257196.9	103	%	0.1				0.08%
Agf	102.7	0.00034	mg/L	0.000198	0.00034	mg/L	0.000198	57.86%
Alf	13.4	0.00308	mg/L	0.000593	0.00308	mg/L	0.000593	19.28%
B_f	1017.0	0.0313	mg/L	0.00028	0.0313	mg/L	0.00028	0.88%
Baf	623.6	0.00843	mg/L	0.000106	0.00843	mg/L	0.000106	1.26%
Bef	-173.6	-0.00006	mg/L	0.000015	-0.00006	mg/L	0.000015	27.73%
Caf	17142.7	2.85	mg/L	0.019	2.85	mg/L	0.019	0.66%
Cdf	-4.8	-0.00017	mg/L	0.000078	-0.00017	mg/L	0.000078	47.28%
Cof	75.5	0.00289	mg/L	0.000257	0.00289	mg/L	0.000257	8.88%
Crf	-50.9	-0.00063	mg/L	0.000096	-0.00063	mg/L	0.000096	15.14%
Cuf	356.4	0.00086	mg/L	0.000008	0.00086	mg/L	0.000008	0.88%
Fef	3.6	0.00440	mg/L	0.000448	0.00440	mg/L	0.000448	10.17%
Kf	775.0	0.619	mg/L	0.0047	0.619	mg/L	0.0047	0.76%
Mgf	1252.4	0.523	mg/L	0.0030	0.523	mg/L	0.0030	0.56%
Mnf	2686.9	0.00466	mg/L	0.000013	0.00466	mg/L	0.000013	0.28%
Mof	17.7	0.00143	mg/L	0.000013	0.00143	mg/L	0.000013	0.92%
Naf	15815.2	3.26	mg/L	0.015	3.26	mg/L	0.015	0.45%
Nif	5.3	0.00024	mg/L	0.000167	0.00024	mg/L	0.000167	71.11%
Pbf	-5.5	-0.00114	mg/L	0.001573	-0.00114	mg/L	0.001573	137.37%
Vf	115.1	0.00064	mg/L	0.000054	0.00064	mg/L	0.000054	8.43%
Znf	-103.8	-0.00221	mg/L	0.000085	-0.00221	mg/L	0.000085	3.85%

Sequence No.: 61  
 Sample ID: 2802080108MS  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 69  
 Date Collected: 2/11/2008 22:49:17  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 2802080108MS

Analyte	Mean Corrected		Calib.		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Sca	480018.7	95.7	%	0.86			0.90%
Yr	245524.5	98.0	%	0.47			0.48%
Ag†	132172.1	0.440	mg/L	0.0117	0.440	mg/L	2.66%
Al†	8695.7	1.99	mg/L	0.006	1.99	mg/L	0.31%
B_†	16944.4	0.520	mg/L	0.0065	0.520	mg/L	1.26%
Ba†	75509.7	1.02	mg/L	0.010	1.02	mg/L	1.02%
Be†	160616.3	0.0517	mg/L	0.00013	0.0517	mg/L	0.26%
Ca†	322351.6	53.5	mg/L	0.17	53.5	mg/L	0.31%
Cd†	5679.7	0.212	mg/L	0.0020	0.212	mg/L	0.95%
Co†	26825.9	1.03	mg/L	0.010	1.03	mg/L	0.97%
Cr†	80692.6	1.00	mg/L	0.000	1.00	mg/L	0.02%
Cu†	414984.8	1.00	mg/L	0.004	1.00	mg/L	0.42%
Fe†	4221.7	5.12	mg/L	0.035	5.12	mg/L	0.035
K†	25389.8	20.3	mg/L	0.12	20.3	mg/L	0.12
Mg†	49503.0	20.7	mg/L	0.09	20.7	mg/L	0.09
Mn†	303665.5	0.527	mg/L	0.0001	0.527	mg/L	0.0001
Mo†	12087.4	0.973	mg/L	0.0163	0.973	mg/L	0.0163
Na†	251677.3	51.8	mg/L	0.28	51.8	mg/L	0.28
Ni†	11512.4	0.514	mg/L	0.0069	0.514	mg/L	0.0069
Pb†	4891.1	1.02	mg/L	0.010	1.02	mg/L	0.010
V†	179534.2	1.01	mg/L	0.002	1.01	mg/L	0.002
Zn†	50703.8	1.08	mg/L	0.010	1.08	mg/L	0.010



Sequence No.: 62  
 Sample ID: 2802080108MSD  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 70  
 Date Collected: 2/11/2008 22:52:22  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 2802080108MSD

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.	Units	Conc.	Units			
Sca	480400.9	95.7	%	0.03				0.03%
Yr	246196.2	98.2	%	0.25				0.26%
Ag†	137438.5	0.457	mg/L	0.0044	0.457	mg/L	0.0044	0.96%
Al†	8697.0	1.99	mg/L	0.029	1.99	mg/L	0.029	1.43%
B_†	17019.5	0.522	mg/L	0.0039	0.522	mg/L	0.0039	0.75%
Ba†	76048.3	1.03	mg/L	0.002	1.03	mg/L	0.002	0.18%
Be†	160906.2	0.0518	mg/L	0.00012	0.0518	mg/L	0.00012	0.22%
Ca†	321198.7	53.3	mg/L	0.31	53.3	mg/L	0.31	0.59%
Cd†	5728.1	0.214	mg/L	0.0004	0.214	mg/L	0.0004	0.19%
Co†	26989.3	1.03	mg/L	0.005	1.03	mg/L	0.005	0.46%
Cr†	80803.7	1.00	mg/L	0.001	1.00	mg/L	0.001	0.14%
Cu†	415785.7	1.00	mg/L	0.007	1.00	mg/L	0.007	0.65%
Fe†	4204.8	5.10	mg/L	0.080	5.10	mg/L	0.080	1.57%
K†	25285.5	20.2	mg/L	0.35	20.2	mg/L	0.35	1.72%
Mg†	49522.9	20.7	mg/L	0.36	20.7	mg/L	0.36	1.75%
Mn†	304320.3	0.528	mg/L	0.0018	0.528	mg/L	0.0018	0.35%
Mo†	12199.3	0.982	mg/L	0.0085	0.982	mg/L	0.0085	0.86%
Na†	250923.3	51.7	mg/L	0.03	51.7	mg/L	0.03	0.06%
Ni†	11603.9	0.518	mg/L	0.0008	0.518	mg/L	0.0008	0.16%
Pb†	4945.9	1.04	mg/L	0.008	1.04	mg/L	0.008	0.79%
V†	179577.9	1.01	mg/L	0.002	1.01	mg/L	0.002	0.21%
Zn†	50985.1	1.08	mg/L	0.008	1.08	mg/L	0.008	0.72%

Sequence No.: 66  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 2/11/2008 23:07:02  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	453781.2	90.4 %	0.40			0.44%
Yr	238002.0	95.0 %	0.66			0.69%
Ag†	300347.3	0.999 mg/L	0.0041	0.999 mg/L	0.0041	0.41%
	QC value within limits for Ag Recovery = 99.92%					
Al†	22589.7	5.17 mg/L	0.003	5.17 mg/L	0.003	0.05%
	QC value within limits for Al Recovery = 103.37%					
B_†	83195.4	2.55 mg/L	0.010	2.55 mg/L	0.010	0.39%
	QC value within limits for B_ Recovery = 102.04%					
Ba†	385278.3	5.21 mg/L	0.031	5.21 mg/L	0.031	0.60%
	QC value within limits for Ba Recovery = 104.15%					
Be†	6617830.1	2.13 mg/L	0.008	2.13 mg/L	0.008	0.39%
	QC value within limits for Be Recovery = 106.44%					
Ca†	308717.5	51.2 mg/L	0.12	51.2 mg/L	0.12	0.23%
	QC value within limits for Ca Recovery = 102.49%					
Cd†	56412.7	2.08 mg/L	0.011	2.08 mg/L	0.011	0.52%
	QC value within limits for Cd Recovery = 104.23%					
Co†	136896.3	5.23 mg/L	0.038	5.23 mg/L	0.038	0.74%
	QC value within limits for Co Recovery = 104.68%					
Cr†	417843.7	5.19 mg/L	0.026	5.19 mg/L	0.026	0.51%
	QC value within limits for Cr Recovery = 103.70%					
Cu†	2156188.2	5.20 mg/L	0.005	5.20 mg/L	0.005	0.09%
	QC value within limits for Cu Recovery = 104.05%					
Fe†	4303.7	5.22 mg/L	0.034	5.22 mg/L	0.034	0.66%
	QC value within limits for Fe Recovery = 104.45%					
K†	62319.0	49.8 mg/L	0.27	49.8 mg/L	0.27	0.54%
	QC value within limits for K Recovery = 99.57%					
Mg†	121921.4	50.9 mg/L	0.01	50.9 mg/L	0.01	0.01%
	QC value within limits for Mg Recovery = 101.76%					
Mn†	3056085.8	5.30 mg/L	0.003	5.30 mg/L	0.003	0.05%
	QC value within limits for Mn Recovery = 106.03%					
Mo†	63534.9	5.11 mg/L	0.026	5.11 mg/L	0.026	0.51%
	QC value within limits for Mo Recovery = 102.25%					
Na†	240732.2	49.6 mg/L	0.18	49.6 mg/L	0.18	0.36%
	QC value within limits for Na Recovery = 99.13%					
Ni†	117829.2	5.26 mg/L	0.026	5.26 mg/L	0.026	0.49%
	QC value within limits for Ni Recovery = 105.20%					
Pb†	25021.5	5.24 mg/L	0.011	5.24 mg/L	0.011	0.22%
	QC value within limits for Pb Recovery = 104.85%					
V†	919083.5	5.17 mg/L	0.002	5.17 mg/L	0.002	0.04%
	QC value within limits for V Recovery = 103.46%					
Zn†	249321.2	5.28 mg/L	0.028	5.28 mg/L	0.028	0.54%
	QC value within limits for Zn Recovery = 105.58%					

All analyte(s) passed QC.

Sequence No.: 67  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/11/2008 23:10:15  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	492891.8	98.2	%	0.33			0.33%
Yr	245762.9	98.1	%	0.32			0.33%
Ag†	-37.6	-0.00013	mg/L	0.000063	-0.00013 mg/L	0.000063	50.34%
	QC value within limits for Ag Recovery = Not calculated						
Al†	22.1	0.00505	mg/L	0.001865	0.00505 mg/L	0.001865	36.91%
	QC value within limits for Al Recovery = Not calculated						
B_†	746.0	0.0230	mg/L	0.00071	0.0230 mg/L	0.00071	3.08%
	QC value greater than the upper limit for B_ Recovery = Not calculated						
Ba†	-23.8	-0.00032	mg/L	0.000008	-0.00032 mg/L	0.000008	2.42%
	QC value within limits for Ba Recovery = Not calculated						
Be†	-14.2	0.00000	mg/L	0.000034	0.00000 mg/L	0.000034	738.96%
	QC value within limits for Be Recovery = Not calculated						
Ca†	-71.8	-0.0119	mg/L	0.00144	-0.0119 mg/L	0.00144	12.07%
	QC value within limits for Ca Recovery = Not calculated						
Cd†	1.0	0.00003	mg/L	0.000079	0.00003 mg/L	0.000079	229.28%
	QC value within limits for Cd Recovery = Not calculated						
Co†	-7.0	-0.00027	mg/L	0.000114	-0.00027 mg/L	0.000114	42.54%
	QC value within limits for Co Recovery = Not calculated						
Cr†	-2.2	-0.00003	mg/L	0.000079	-0.00003 mg/L	0.000079	292.81%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	-402.8	-0.00097	mg/L	0.000059	-0.00097 mg/L	0.000059	6.05%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	1.5	0.00187	mg/L	0.002065	0.00187 mg/L	0.002065	110.16%
	QC value within limits for Fe Recovery = Not calculated						
K†	19.8	0.0158	mg/L	0.01579	0.0158 mg/L	0.01579	99.87%
	QC value within limits for K Recovery = Not calculated						
Mg†	-58.3	-0.0243	mg/L	0.00100	-0.0243 mg/L	0.00100	4.12%
	QC value within limits for Mg Recovery = Not calculated						
Mn†	-278.6	-0.00048	mg/L	0.000010	-0.00048 mg/L	0.000010	2.04%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	18.9	0.00152	mg/L	0.000196	0.00152 mg/L	0.000196	12.92%
	QC value within limits for Mo Recovery = Not calculated						
Na†	-65.4	-0.0135	mg/L	0.00179	-0.0135 mg/L	0.00179	13.29%
	QC value within limits for Na Recovery = Not calculated						
Ni†	1.6	0.00007	mg/L	0.000052	0.00007 mg/L	0.000052	72.56%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	-7.0	-0.00146	mg/L	0.000692	-0.00146 mg/L	0.000692	47.28%
	QC value within limits for Pb Recovery = Not calculated						
V†	-14.3	-0.00008	mg/L	0.000026	-0.00008 mg/L	0.000026	32.24%
	QC value within limits for V Recovery = Not calculated						
Zn†	-134.2	-0.00286	mg/L	0.000155	-0.00286 mg/L	0.000155	5.43%
	QC value within limits for Zn Recovery = Not calculated						
	QC Failed. Retry.						

Sequence No.: 68  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/11/2008 23:12:48  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	484940.5	96.7	%	0.87			0.90%
Yr	247101.8	98.6	%	1.27			1.29%
Ag†	49.4	0.00016	mg/L	0.000036	0.00016 mg/L	0.000036	21.99%
	QC value within limits for Ag Recovery = Not calculated						
Al†	-6.5	-0.00148	mg/L	0.005961	-0.00148 mg/L	0.005961	401.99%

B_t	QC value within limits for Al	Recovery = Not calculated				
	592.9	0.0183 mg/L	0.00051	0.0183 mg/L	0.00051	2.80%
Bat	QC value within limits for B_	Recovery = Not calculated				
	-26.4	-0.00036 mg/L	0.000017	-0.00036 mg/L	0.000017	4.79%
Bet	QC value within limits for Ba	Recovery = Not calculated				
	-163.8	-0.00005 mg/L	0.000024	-0.00005 mg/L	0.000024	45.43%
Cat	QC value within limits for Be	Recovery = Not calculated				
	-77.5	-0.0129 mg/L	0.00121	-0.0129 mg/L	0.00121	9.44%
Cdt	QC value within limits for Ca	Recovery = Not calculated				
	-1.7	-0.00006 mg/L	0.000021	-0.00006 mg/L	0.000021	32.76%
Cot	QC value within limits for Cd	Recovery = Not calculated				
	-12.8	-0.00049 mg/L	0.000186	-0.00049 mg/L	0.000186	37.82%
Crt	QC value within limits for Co	Recovery = Not calculated				
	3.7	0.00005 mg/L	0.000067	0.00005 mg/L	0.000067	144.75%
Cuf	QC value within limits for Cr	Recovery = Not calculated				
	-415.0	-0.00100 mg/L	0.000075	-0.00100 mg/L	0.000075	7.50%
Fet	QC value within limits for Cu	Recovery = Not calculated				
	-0.1	-0.00007 mg/L	0.001195	-0.00007 mg/L	0.001195	>999.9%
Kf	QC value within limits for Fe	Recovery = Not calculated				
	-18.8	-0.0150 mg/L	0.03598	-0.0150 mg/L	0.03598	239.35%
Mgt	QC value within limits for K	Recovery = Not calculated				
	-54.1	-0.0226 mg/L	0.00094	-0.0226 mg/L	0.00094	4.15%
Mnt	QC value within limits for Mg	Recovery = Not calculated				
	-290.1	-0.00050 mg/L	0.000004	-0.00050 mg/L	0.000004	0.79%
Mot	QC value within limits for Mn	Recovery = Not calculated				
	8.9	0.00072 mg/L	0.000041	0.00072 mg/L	0.000041	5.67%
Nat	QC value within limits for Mo	Recovery = Not calculated				
	-39.1	-0.00805 mg/L	0.012531	-0.00805 mg/L	0.012531	155.65%
Nit	QC value within limits for Na	Recovery = Not calculated				
	-3.5	-0.00016 mg/L	0.000277	-0.00016 mg/L	0.000277	176.79%
Pbt	QC value within limits for Ni	Recovery = Not calculated				
	-13.0	-0.00273 mg/L	0.001402	-0.00273 mg/L	0.001402	51.41%
Vt	QC value within limits for Pb	Recovery = Not calculated				
	-11.5	-0.00006 mg/L	0.000202	-0.00006 mg/L	0.000202	314.47%
Znt	QC value within limits for V	Recovery = Not calculated				
	-130.6	-0.00278 mg/L	0.000090	-0.00278 mg/L	0.000090	3.24%
	QC value within limits for Zn	Recovery = Not calculated				

All analyte(s) passed QC.

Sequence No.: 69  
 Sample ID: MCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 5  
 Date Collected: 2/11/2008 23:16:12  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Mean Data: MCV

Analyte	Mean Corrected		Calib. Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc.	Units		
Sca	471833.6		94.0 %	0.59				0.62%
Yr	243074.1		97.0 %	0.00				0.00%
Agf	143806.9		0.478 mg/L	0.0051	0.478 mg/L	0.0051		1.07%
	QC value within limits for Ag Recovery = 95.68%							
Alf	11139.6		2.55 mg/L	0.006	2.55 mg/L	0.006		0.23%
	QC value within limits for Al Recovery = 101.95%							
B_f	41652.1		1.28 mg/L	0.015	1.28 mg/L	0.015		1.19%
	QC value within limits for B_ Recovery = 102.17%							
Baf	193924.3		2.62 mg/L	0.006	2.62 mg/L	0.006		0.24%
	QC value within limits for Ba Recovery = 104.84%							
Be_f	3307009.9		1.06 mg/L	0.004	1.06 mg/L	0.004		0.40%
	QC value within limits for Be Recovery = 106.38%							
Ca_f	154550.1		25.7 mg/L	0.03	25.7 mg/L	0.03		0.12%
	QC value within limits for Ca Recovery = 102.61%							
Cd_f	27990.6		1.03 mg/L	0.010	1.03 mg/L	0.010		0.94%
	QC value within limits for Cd Recovery = 103.45%							
Co_f	68875.7		2.63 mg/L	0.022	2.63 mg/L	0.022		0.84%
	QC value within limits for Co Recovery = 105.33%							
Cr_f	208177.2		2.58 mg/L	0.004	2.58 mg/L	0.004		0.16%
	QC value within limits for Cr Recovery = 103.33%							
Cu_f	1074302.6		2.59 mg/L	0.014	2.59 mg/L	0.014		0.53%
	QC value within limits for Cu Recovery = 103.68%							
Fe_f	2171.4		2.63 mg/L	0.004	2.63 mg/L	0.004		0.13%
	QC value within limits for Fe Recovery = 105.40%							
K_f	30453.4		24.3 mg/L	0.03	24.3 mg/L	0.03		0.13%
	QC value within limits for K Recovery = 97.31%							
Mg_f	61380.9		25.6 mg/L	0.07	25.6 mg/L	0.07		0.26%
	QC value within limits for Mg Recovery = 102.47%							
Mn_f	1545898.5		2.68 mg/L	0.007	2.68 mg/L	0.007		0.28%
	QC value within limits for Mn Recovery = 107.27%							
Mo_f	31852.6		2.56 mg/L	0.033	2.56 mg/L	0.033		1.30%
	QC value within limits for Mo Recovery = 102.53%							
Na_f	119108.5		24.5 mg/L	0.02	24.5 mg/L	0.02		0.10%
	QC value within limits for Na Recovery = 98.10%							
Ni_f	59696.0		2.66 mg/L	0.023	2.66 mg/L	0.023		0.88%
	QC value within limits for Ni Recovery = 106.59%							
Pb_f	12657.9		2.65 mg/L	0.010	2.65 mg/L	0.010		0.37%
	QC value within limits for Pb Recovery = 106.08%							
V_f	457756.4		2.58 mg/L	0.007	2.58 mg/L	0.007		0.27%
	QC value within limits for V Recovery = 103.05%							
Zn_f	125742.2		2.66 mg/L	0.031	2.66 mg/L	0.031		1.16%
	QC value within limits for Zn Recovery = 106.49%							

All analyte(s) passed QC.

Sequence No.: 76  
Sample ID: 2801150171  
Analyst:  
Initial Sample Wt:  
Dilution: 1X

Autosampler Location: 80  
Date Collected: 2/11/2008 23:43:54  
Data Type: Original  
Initial Sample Vol:  
Sample Prep Vol:

Mean Data: 2801150171

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	462632.4	92.2	✓	0.41				0.44%
Yr	238987.1	95.4	✓	0.41				0.42%
Ag†	-55.4	-0.00018	mg/L	0.000038	-0.00018	mg/L	0.000038	20.42%
Al†	-21.4	-0.00489	mg/L	0.003006	-0.00489	mg/L	0.003006	61.51%
B_†	5088.5	0.157	mg/L	0.0009	0.157	mg/L	0.0009	0.59%
Ba†	11566.4	0.156	mg/L	0.0003	0.156	mg/L	0.0003	0.22%
Be†	-776.3	-0.00025	mg/L	0.000026	-0.00025	mg/L	0.000026	10.56%
Ca†	484521.0	80.4	mg/L	0.11	80.4	mg/L	0.11	0.14%
Cd†	-21.9	-0.00080	mg/L	0.000127	-0.00080	mg/L	0.000127	15.83%
Co†	-17.6	-0.00067	mg/L	0.000078	-0.00067	mg/L	0.000078	11.56%
Cr†	-88.8	-0.00110	mg/L	0.000011	-0.00110	mg/L	0.000011	0.99%
Cu†	-149.3	-0.00036	mg/L	0.000084	-0.00036	mg/L	0.000084	23.17%
Fe†	7.5	0.00911	mg/L	0.004590	0.00911	mg/L	0.004590	50.40%
K†	6751.5	5.39	mg/L	0.017	5.39	mg/L	0.017	0.31%
Mg†	72482.0	30.2	mg/L	0.00	30.2	mg/L	0.00	0.01%
Mn†	-450.5	-0.00078	mg/L	0.000020	-0.00078	mg/L	0.000020	2.50%
Mo†	72.7	0.00585	mg/L	0.000945	0.00585	mg/L	0.000945	16.15%
Na†	471632.6	97.1	mg/L	0.14	97.1	mg/L	0.14	0.14%
Ni†	12.7	0.00057	mg/L	0.000205	0.00057	mg/L	0.000205	35.99%
Pb†	-25.2	-0.00527	mg/L	0.001289	-0.00527	mg/L	0.001289	24.45%
V†	405.2	0.00226	mg/L	0.000018	0.00226	mg/L	0.000018	0.79%
Zn†	885.5	0.0189	mg/L	0.00105	0.0189	mg/L	0.00105	5.57%

Sequence No.: 77  
 Sample ID: 2801150171MS  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 81  
 Date Collected: 2/11/2008 23:48:16  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 2801150171MS

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	450081.0	89.7	%	0.59				0.66%
Yr	237011.7	94.6	%	0.37				0.40%
Ag†	131029.9	0.436	mg/L	0.0012	0.436	mg/L	0.0012	0.27%
Al†	8874.6	2.03	mg/L	0.002	2.03	mg/L	0.002	0.12%
B_†	21714.0	0.666	mg/L	0.0011	0.666	mg/L	0.0011	0.17%
Ba†	87647.8	1.18	mg/L	0.002	1.18	mg/L	0.002	0.15%
Be†	161764.1	0.0520	mg/L	0.00011	0.0520	mg/L	0.00011	0.20%
Ca†	772877.0	128	mg/L	0.1	128	mg/L	0.1	0.06%
Cd†	5888.0	0.220	mg/L	0.0012	0.220	mg/L	0.0012	0.54%
Co†	27616.3	1.06	mg/L	0.003	1.06	mg/L	0.003	0.26%
Cr†	83171.6	1.03	mg/L	0.002	1.03	mg/L	0.002	0.17%
Cu†	423719.3	1.02	mg/L	0.006	1.02	mg/L	0.006	0.56%
Fe†	4346.7	5.27	mg/L	0.024	5.27	mg/L	0.024	0.46%
K†	32193.2	25.7	mg/L	0.13	25.7	mg/L	0.13	0.50%
Mg†	118418.2	49.4	mg/L	0.03	49.4	mg/L	0.03	0.06%
Mn†	310022.9	0.538	mg/L	0.0006	0.538	mg/L	0.0006	0.11%
Mo†	12518.0	1.01	mg/L	0.004	1.01	mg/L	0.004	0.44%
Na†	700993.9	144	mg/L	0.4	144	mg/L	0.4	0.25%
Ni†	11849.1	0.529	mg/L	0.0007	0.529	mg/L	0.0007	0.12%
Pb†	4967.3	1.04	mg/L	0.001	1.04	mg/L	0.001	0.05%
V†	183576.1	1.03	mg/L	0.003	1.03	mg/L	0.003	0.28%
Zn†	53793.4	1.14	mg/L	0.004	1.14	mg/L	0.004	0.31%

Sequence No.: 78  
 Sample ID: 2801150171MSD  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 1X

Autosampler Location: 82  
 Date Collected: 2/11/2008 23:51:22  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 2801150171MSD

Analyte	Mean Corrected		Calib.		Sample		Std.Dev.	RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units		
Sca	450409.1	89.8	%	0.70				0.78%
Yr	238145.6	95.0	%	0.28				0.29%
Agf	130607.8	0.434	mg/L	0.0006	0.434	mg/L	0.0006	0.13%
Alf	8870.2	2.03	mg/L	0.009	2.03	mg/L	0.009	0.44%
B_t	21510.9	0.660	mg/L	0.0075	0.660	mg/L	0.0075	1.14%
Bat	88106.1	1.19	mg/L	0.000	1.19	mg/L	0.000	0.01%
Bet	162236.8	0.0522	mg/L	0.00011	0.0522	mg/L	0.00011	0.21%
Caf	775471.0	129	mg/L	0.6	129	mg/L	0.6	0.50%
Cdt	5876.3	0.219	mg/L	0.0022	0.219	mg/L	0.0022	1.01%
Cof	27337.6	1.05	mg/L	0.012	1.05	mg/L	0.012	1.12%
Crf	82512.0	1.02	mg/L	0.012	1.02	mg/L	0.012	1.16%
Cuf	424999.3	1.03	mg/L	0.003	1.03	mg/L	0.003	0.32%
Fef	4310.6	5.23	mg/L	0.028	5.23	mg/L	0.028	0.53%
Kf	32238.9	25.8	mg/L	0.12	25.8	mg/L	0.12	0.49%
Mgf	118509.6	49.5	mg/L	0.20	49.5	mg/L	0.20	0.40%
Mnt	311414.7	0.540	mg/L	0.0007	0.540	mg/L	0.0007	0.13%
Mof	12460.0	1.00	mg/L	0.012	1.00	mg/L	0.012	1.18%
Naf	701750.4	144	mg/L	0.8	144	mg/L	0.8	0.57%
Nit	11734.2	0.524	mg/L	0.0034	0.524	mg/L	0.0034	0.65%
Pbt	4943.0	1.04	mg/L	0.012	1.04	mg/L	0.012	1.21%
Vt	183975.1	1.04	mg/L	0.001	1.04	mg/L	0.001	0.07%
Znt	53303.2	1.13	mg/L	0.013	1.13	mg/L	0.013	1.16%



Sequence No.: 80  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 2/11/2008 23:58:46  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	457539.8	91.2	%	0.14			0.16%
Yr	236849.5	94.5	%	0.73			0.77%
Ag†	303953.8	1.01	mg/L	0.001	1.01 mg/L	0.001	0.06%
	QC value within limits for Ag	Recovery = 101.12%					
Al†	23024.8	5.27	mg/L	0.068	5.27 mg/L	0.068	1.29%
	QC value within limits for Al	Recovery = 105.36%					
B_†	84626.0	2.59	mg/L	0.007	2.59 mg/L	0.007	0.29%
	QC value within limits for B_	Recovery = 103.80%					
Ba†	389631.0	5.27	mg/L	0.004	5.27 mg/L	0.004	0.07%
	QC value within limits for Ba	Recovery = 105.32%					
Be†	6619259.6	2.13	mg/L	0.004	2.13 mg/L	0.004	0.19%
	QC value within limits for Be	Recovery = 106.46%					
Ca†	311054.1	51.6	mg/L	0.03	51.6 mg/L	0.03	0.06%
	QC value within limits for Ca	Recovery = 103.26%					
Cd†	57004.8	2.11	mg/L	0.002	2.11 mg/L	0.002	0.09%
	QC value within limits for Cd	Recovery = 105.33%					
Co†	138718.3	5.30	mg/L	0.003	5.30 mg/L	0.003	0.06%
	QC value within limits for Co	Recovery = 106.07%					
Cr†	423498.1	5.26	mg/L	0.002	5.26 mg/L	0.002	0.05%
	QC value within limits for Cr	Recovery = 105.10%					
Cu†	2169933.2	5.24	mg/L	0.029	5.24 mg/L	0.029	0.56%
	QC value within limits for Cu	Recovery = 104.71%					
Fe†	4392.2	5.33	mg/L	0.103	5.33 mg/L	0.103	1.92%
	QC value within limits for Fe	Recovery = 106.59%					
K†	63283.7	50.6	mg/L	0.14	50.6 mg/L	0.14	0.27%
	QC value within limits for K	Recovery = 101.11%					
Mg†	123175.1	51.4	mg/L	0.05	51.4 mg/L	0.05	0.09%
	QC value within limits for Mg	Recovery = 102.81%					
Mn†	3075213.7	5.33	mg/L	0.007	5.33 mg/L	0.007	0.13%
	QC value within limits for Mn	Recovery = 106.70%					
Mo†	64583.6	5.20	mg/L	0.008	5.20 mg/L	0.008	0.15%
	QC value within limits for Mo	Recovery = 103.94%					
Na†	241884.7	49.8	mg/L	0.05	49.8 mg/L	0.05	0.11%
	QC value within limits for Na	Recovery = 99.61%					
Ni†	119607.4	5.34	mg/L	0.012	5.34 mg/L	0.012	0.23%
	QC value within limits for Ni	Recovery = 106.78%					
Pb†	25432.7	5.33	mg/L	0.007	5.33 mg/L	0.007	0.14%
	QC value within limits for Pb	Recovery = 106.57%					
V†	924931.5	5.21	mg/L	0.002	5.21 mg/L	0.002	0.03%
	QC value within limits for V	Recovery = 104.12%					
Zn†	253027.9	5.36	mg/L	0.002	5.36 mg/L	0.002	0.04%
	QC value within limits for Zn	Recovery = 107.15%					

All analyte(s) passed QC.

Sequence No.: 81  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/12/2008 00:01:59  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	488208.7	97.3 %		0.85			0.87%
Yr	247146.7	98.6 %		0.04			0.04%
Ag†	26.6	0.00009 mg/L		0.000099	0.00009 mg/L	0.000099	111.70%
Alt	QC value within limits for Ag	Recovery = Not calculated					
	-17.0	-0.00388 mg/L		0.004787	-0.00388 mg/L	0.004787	123.41%
B_†	767.4	0.0236 mg/L		0.00120	0.0236 mg/L	0.00120	5.08%
Ba†	QC value greater than the upper limit for B	Recovery = Not calculated					
	-22.0	-0.00030 mg/L		0.000005	-0.00030 mg/L	0.000005	1.80%
Be†	QC value within limits for Ba	Recovery = Not calculated					
	-152.8	-0.00005 mg/L		0.000040	-0.00005 mg/L	0.000040	80.53%
Ca†	QC value within limits for Be	Recovery = Not calculated					
	-65.9	-0.0109 mg/L		0.00067	-0.0109 mg/L	0.00067	6.10%
Cd†	QC value within limits for Ca	Recovery = Not calculated					
	-1.3	-0.00005 mg/L		0.000033	-0.00005 mg/L	0.000033	66.61%
Co†	QC value within limits for Cd	Recovery = Not calculated					
	-6.1	-0.00023 mg/L		0.000188	-0.00023 mg/L	0.000188	80.56%
Cr†	QC value within limits for Co	Recovery = Not calculated					
	-2.0	-0.00002 mg/L		0.000025	-0.00002 mg/L	0.000025	100.86%
Cu†	QC value within limits for Cr	Recovery = Not calculated					
	-464.2	-0.00112 mg/L		0.000108	-0.00112 mg/L	0.000108	9.67%
Fe†	QC value within limits for Cu	Recovery = Not calculated					
	1.5	0.00181 mg/L		0.001233	0.00181 mg/L	0.001233	68.32%
K†	QC value within limits for Fe	Recovery = Not calculated					
	8.9	0.00715 mg/L		0.028945	0.00715 mg/L	0.028945	404.90%
Mg†	QC value within limits for K	Recovery = Not calculated					
	-56.5	-0.0236 mg/L		0.00173	-0.0236 mg/L	0.00173	7.35%
Mn†	QC value within limits for Mg	Recovery = Not calculated					
	-268.0	-0.00046 mg/L		0.000001	-0.00046 mg/L	0.000001	0.13%
Mo†	QC value within limits for Mn	Recovery = Not calculated					
	21.1	0.00170 mg/L		0.000492	0.00170 mg/L	0.000492	28.95%
Na†	QC value within limits for Mo	Recovery = Not calculated					
	-19.4	-0.00400 mg/L		0.005249	-0.00400 mg/L	0.005249	131.25%
Ni†	QC value within limits for Na	Recovery = Not calculated					
	-0.4	-0.00002 mg/L		0.000222	-0.00002 mg/L	0.000222	>999.9%
Pb†	QC value within limits for Ni	Recovery = Not calculated					
	-6.0	-0.00126 mg/L		0.001965	-0.00126 mg/L	0.001965	155.53%
V†	QC value within limits for Pb	Recovery = Not calculated					
	-15.6	-0.00009 mg/L		0.000280	-0.00009 mg/L	0.000280	319.80%
Zn†	QC value within limits for V	Recovery = Not calculated					
	-140.2	-0.00299 mg/L		0.000154	-0.00299 mg/L	0.000154	5.15%
	QC value within limits for Zn	Recovery = Not calculated					
	QC Failed. Retry.						

Sequence No.: 82  
 Sample ID: CCB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/12/2008 00:04:32  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	493878.0	98.4 %		0.79			0.80%
Yr	248385.7	99.1 %		0.05			0.05%
Ag†	72.5	0.00024 mg/L		0.000377	0.00024 mg/L	0.000377	156.30%
Alt	QC value within limits for Ag	Recovery = Not calculated					
	7.7	0.00177 mg/L		0.001620	0.00177 mg/L	0.001620	91.62%

B_†	QC value within limits for Al	579.1	Recovery = Not calculated	0.0178 mg/L	0.00015	0.0178 mg/L	0.00015	0.82%
Bat	QC value within limits for B_	-22.8	Recovery = Not calculated	-0.00031 mg/L	0.000097	-0.00031 mg/L	0.000097	31.37%
Bet	QC value within limits for Ba	-82.6	Recovery = Not calculated	-0.00003 mg/L	0.000008	-0.00003 mg/L	0.000008	28.34%
Cat	QC value within limits for Be	-85.8	Recovery = Not calculated	-0.0142 mg/L	0.00084	-0.0142 mg/L	0.00084	5.88%
Cdt	QC value within limits for Ca	-6.9	Recovery = Not calculated	-0.00026 mg/L	0.000017	-0.00026 mg/L	0.000017	6.84%
Cot	QC value within limits for Cd	-11.0	Recovery = Not calculated	-0.00042 mg/L	0.000036	-0.00042 mg/L	0.000036	8.58%
Crt	QC value within limits for Co	-8.4	Recovery = Not calculated	-0.00010 mg/L	0.000064	-0.00010 mg/L	0.000064	61.66%
Cut	QC value within limits for Cr	-460.2	Recovery = Not calculated	-0.00111 mg/L	0.000029	-0.00111 mg/L	0.000029	2.63%
Fet	QC value within limits for Cu	-1.2	Recovery = Not calculated	-0.00146 mg/L	0.001268	-0.00146 mg/L	0.001268	86.79%
K†	QC value within limits for Fe	3.6	Recovery = Not calculated	0.00289 mg/L	0.002609	0.00289 mg/L	0.002609	90.14%
Mgt	QC value within limits for K	-58.4	Recovery = Not calculated	-0.0244 mg/L	0.00060	-0.0244 mg/L	0.00060	2.48%
Mnt	QC value within limits for Mg	-290.4	Recovery = Not calculated	-0.00050 mg/L	0.000016	-0.00050 mg/L	0.000016	3.08%
Mot	QC value within limits for Mn	9.0	Recovery = Not calculated	0.00072 mg/L	0.000152	0.00072 mg/L	0.000152	21.07%
Nat	QC value within limits for Mo	-41.6	Recovery = Not calculated	-0.00858 mg/L	0.003752	-0.00858 mg/L	0.003752	43.75%
Nit	QC value within limits for Na	-5.2	Recovery = Not calculated	-0.00023 mg/L	0.000346	-0.00023 mg/L	0.000346	150.12%
Pbt	QC value within limits for Ni	-10.3	Recovery = Not calculated	-0.00216 mg/L	0.000768	-0.00216 mg/L	0.000768	35.45%
V†	QC value within limits for Pb	-30.1	Recovery = Not calculated	-0.00017 mg/L	0.000042	-0.00017 mg/L	0.000042	25.07%
Znt	QC value within limits for V	-141.0	Recovery = Not calculated	-0.00300 mg/L	0.000326	-0.00300 mg/L	0.000326	10.85%
	QC value within limits for Zn		Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 92  
 Sample ID: 2802050696\_10X  
 Analyst:  
 Initial Sample Wt:  
 Dilution: 10X

Autosampler Location: 93  
 Date Collected: 2/12/2008 00:45:35  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: 2802050696\_10X

Analyte	Mean Corrected		Calib. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	459441.9	91.6	%	0.67				0.73%
Yr	242703.6	96.9	%	0.63				0.65%
Agt	94.0	0.00031	mg/L	0.000092	0.00313	mg/L	0.000922	29.48%
Alf	5.0	0.00114	mg/L	0.011107	0.0114	mg/L	0.11107	978.59%
B_t	11857.6	0.365	mg/L	0.0006	3.65	mg/L	0.006	0.16%
Bar	194.7	0.00263	mg/L	0.000053	0.0263	mg/L	0.00053	2.00%
Bel	-549.4	-0.00018	mg/L	0.000038	-0.00177	mg/L	0.000379	21.45%
Car	271371.0	45.0	mg/L	0.07	450	mg/L	0.7	0.14%
Cdf	-7.0	-0.00025	mg/L	0.000338	-0.00252	mg/L	0.003383	134.33%
Cof	41.1	0.00157	mg/L	0.000375	0.0157	mg/L	0.00375	23.86%
Crt	72.3	0.00090	mg/L	0.000172	0.00897	mg/L	0.001718	19.15%
Cuf	-368.3	-0.00089	mg/L	0.000050	-0.00886	mg/L	0.000504	5.69%
Fef	18.8	0.0228	mg/L	0.00162	0.228	mg/L	0.0162	7.11%
Kr	3567.2	2.85	mg/L	0.071	28.5	mg/L	0.71	2.48%
Mgt	48850.5	20.4	mg/L	0.31	204	mg/L	3.1	1.51%
Mnt	64332.2	0.112	mg/L	0.0006	1.12	mg/L	0.006	0.56%
Mot	733.1	0.0590	mg/L	0.00096	0.590	mg/L	0.0096	1.63%
Naf	699620.5	144	mg/L	0.5	1440	mg/L	5.1	0.36%
Nit	116.2	0.00519	mg/L	0.000272	0.0519	mg/L	0.00272	5.24%
Pbt	-23.5	-0.00492	mg/L	0.000250	-0.0492	mg/L	0.00250	5.08%
Vt	889.1	0.00498	mg/L	0.000092	0.0498	mg/L	0.00092	1.84%
Znt	-74.4	-0.00162	mg/L	0.000173	-0.0162	mg/L	0.00173	10.67%

Sequence No.: 93  
 Sample ID: CCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 2/12/2008 00:49:58  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	451218.3	89.9 %	%	0.59			0.65%
Yr	236360.2	94.3 %	%	0.03			0.03%
Ag†	307727.2	1.02 mg/L	mg/L	0.006	1.02 mg/L	0.006	0.61%
	QC value within limits for Ag Recovery = 102.37%						
Al†	22960.1	5.25 mg/L	mg/L	0.024	5.25 mg/L	0.024	0.45%
	QC value within limits for Al Recovery = 105.06%						
B_†	85624.5	2.63 mg/L	mg/L	0.019	2.63 mg/L	0.019	0.71%
	QC value within limits for B_ Recovery = 105.02%						
Ba†	394304.9	5.33 mg/L	mg/L	0.048	5.33 mg/L	0.048	0.90%
	QC value within limits for Ba Recovery = 106.59%						
Be†	6657479.5	2.14 mg/L	mg/L	0.005	2.14 mg/L	0.005	0.24%
	QC value within limits for Be Recovery = 107.08%						
Ca†	310456.5	51.5 mg/L	mg/L	0.02	51.5 mg/L	0.02	0.04%
	QC value within limits for Ca Recovery = 103.07%						
Cd†	57840.1	2.14 mg/L	mg/L	0.016	2.14 mg/L	0.016	0.74%
	QC value within limits for Cd Recovery = 106.87%						
Co†	140420.1	5.37 mg/L	mg/L	0.043	5.37 mg/L	0.043	0.80%
	QC value within limits for Co Recovery = 107.37%						
Cr†	429493.3	5.33 mg/L	mg/L	0.049	5.33 mg/L	0.049	0.92%
	QC value within limits for Cr Recovery = 106.59%						
Cu†	2170139.4	5.24 mg/L	mg/L	0.006	5.24 mg/L	0.006	0.11%
	QC value within limits for Cu Recovery = 104.72%						
Fe†	4364.8	5.30 mg/L	mg/L	0.051	5.30 mg/L	0.051	0.95%
	QC value within limits for Fe Recovery = 105.93%						
K†	63378.0	50.6 mg/L	mg/L	0.60	50.6 mg/L	0.60	1.19%
	QC value within limits for K Recovery = 101.26%						
Mg†	123137.1	51.4 mg/L	mg/L	0.12	51.4 mg/L	0.12	0.24%
	QC value within limits for Mg Recovery = 102.78%						
Mn†	3089986.4	5.36 mg/L	mg/L	0.021	5.36 mg/L	0.021	0.39%
	QC value within limits for Mn Recovery = 107.21%						
Mo†	65227.1	5.25 mg/L	mg/L	0.043	5.25 mg/L	0.043	0.81%
	QC value within limits for Mo Recovery = 104.98%						
Na†	241398.7	49.7 mg/L	mg/L	0.41	49.7 mg/L	0.41	0.83%
	QC value within limits for Na Recovery = 99.41%						
Ni†	120768.1	5.39 mg/L	mg/L	0.043	5.39 mg/L	0.043	0.79%
	QC value within limits for Ni Recovery = 107.82%						
Pb†	25718.9	5.39 mg/L	mg/L	0.044	5.39 mg/L	0.044	0.82%
	QC value within limits for Pb Recovery = 107.77%						
V†	929696.0	5.23 mg/L	mg/L	0.009	5.23 mg/L	0.009	0.18%
	QC value within limits for V Recovery = 104.66%						
Zn†	255758.6	5.42 mg/L	mg/L	0.039	5.42 mg/L	0.039	0.72%
	QC value within limits for Zn Recovery = 108.31%						

All analyte(s) passed QC.

Sequence No.: 94
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 2/12/2008 00:53:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc., Calib. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Rows include elements like Sca, Yr, Agt, Al, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, Pb, V, Zn with their respective values and QC status.

Sequence No.: 95
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 2/12/2008 00:55:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc., Calib. Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Rows include elements like Sca, Yr, Agt, Al with their respective values and QC status.

B_†	QC value within limits for Al	531.7	Recovery = Not calculated	0.0164 mg/L	0.00028	0.0164 mg/L	0.00028	1.69%
Bat	QC value within limits for B_	-24.8	Recovery = Not calculated	-0.00034 mg/L	0.000000	-0.00034 mg/L	0.000000	0.12%
Ber	QC value within limits for Ba	-120.8	Recovery = Not calculated	-0.00004 mg/L	0.000039	-0.00004 mg/L	0.000039	99.76%
Cat	QC value within limits for Be	-85.0	Recovery = Not calculated	-0.0141 mg/L	0.00039	-0.0141 mg/L	0.00039	2.74%
Cdt	QC value within limits for Ca	2.2	Recovery = Not calculated	0.00008 mg/L	0.000108	0.00008 mg/L	0.000108	134.48%
Cof	QC value within limits for Cd	-6.1	Recovery = Not calculated	-0.00023 mg/L	0.000023	-0.00023 mg/L	0.000023	9.67%
Crt	QC value within limits for Co	-0.7	Recovery = Not calculated	-0.00001 mg/L	0.000034	-0.00001 mg/L	0.000034	410.15%
Cut	QC value within limits for Cr	-560.6	Recovery = Not calculated	-0.00135 mg/L	0.000034	-0.00135 mg/L	0.000034	2.52%
Fer	QC value within limits for Cu	-0.3	Recovery = Not calculated	-0.00040 mg/L	0.000912	-0.00040 mg/L	0.000912	225.35%
K†	QC value within limits for Fe	-23.0	Recovery = Not calculated	-0.0184 mg/L	0.02958	-0.0184 mg/L	0.02958	161.02%
Mg†	QC value within limits for K	-57.5	Recovery = Not calculated	-0.0240 mg/L	0.00210	-0.0240 mg/L	0.00210	8.74%
Mnt	QC value within limits for Mg	-245.9	Recovery = Not calculated	-0.00043 mg/L	0.000099	-0.00043 mg/L	0.000099	23.09%
Mot	QC value within limits for Mn	7.0	Recovery = Not calculated	0.00056 mg/L	0.000010	0.00056 mg/L	0.000010	1.84%
Nat	QC value within limits for Mo	44.1	Recovery = Not calculated	0.00908 mg/L	0.007344	0.00908 mg/L	0.007344	80.89%
Nit	QC value within limits for Na	-2.7	Recovery = Not calculated	-0.00012 mg/L	0.000287	-0.00012 mg/L	0.000287	241.44%
Pbt	QC value within limits for Ni	-10.8	Recovery = Not calculated	-0.00225 mg/L	0.000881	-0.00225 mg/L	0.000881	39.07%
V†	QC value within limits for Pb	-20.4	Recovery = Not calculated	-0.00011 mg/L	0.000043	-0.00011 mg/L	0.000043	37.71%
Znt	QC value within limits for V	-142.9	Recovery = Not calculated	-0.00305 mg/L	0.000089	-0.00305 mg/L	0.000089	2.92%
	QC value within limits for Zn		Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 96  
 Sample ID: MCV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 5  
 Date Collected: 2/12/2008 00:59:07  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: MCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	470971.4	93.9	%	0.07			0.08%
Yr	240161.4	95.8	%	0.50			0.52%
Ag†	144961.2	0.482	mg/L	0.0022	0.482 mg/L	0.0022	0.46%
	QC value within limits for Ag Recovery = 96.45%						
Al†	11384.9	2.60	mg/L	0.025	2.60 mg/L	0.025	0.95%
	QC value within limits for Al Recovery = 104.19%						
B_†	41915.9	1.29	mg/L	0.013	1.29 mg/L	0.013	1.01%
	QC value within limits for B_ Recovery = 102.82%						
Ba†	194705.0	2.63	mg/L	0.007	2.63 mg/L	0.007	0.28%
	QC value within limits for Ba Recovery = 105.26%						
Be†	3307689.3	1.06	mg/L	0.005	1.06 mg/L	0.005	0.51%
	QC value within limits for Be Recovery = 106.40%						
Ca†	155635.6	25.8	mg/L	0.11	25.8 mg/L	0.11	0.41%
	QC value within limits for Ca Recovery = 103.34%						
Cd†	28322.2	1.05	mg/L	0.003	1.05 mg/L	0.003	0.25%
	QC value within limits for Cd Recovery = 104.67%						
Co†	69565.3	2.66	mg/L	0.021	2.66 mg/L	0.021	0.79%
	QC value within limits for Co Recovery = 106.39%						
Cr†	209067.9	2.59	mg/L	0.011	2.59 mg/L	0.011	0.41%
	QC value within limits for Cr Recovery = 103.77%						
Cu†	1073413.7	2.59	mg/L	0.000	2.59 mg/L	0.000	0.01%
	QC value within limits for Cu Recovery = 103.60%						
Fe†	2194.8	2.66	mg/L	0.016	2.66 mg/L	0.016	0.60%
	QC value within limits for Fe Recovery = 106.53%						
K†	31224.0	24.9	mg/L	0.28	24.9 mg/L	0.28	1.13%
	QC value within limits for K Recovery = 99.77%						
Mg†	62172.9	25.9	mg/L	0.00	25.9 mg/L	0.00	0.01%
	QC value within limits for Mg Recovery = 103.79%						
Mn†	1550299.1	2.69	mg/L	0.005	2.69 mg/L	0.005	0.19%
	QC value within limits for Mn Recovery = 107.58%						
Mo†	32088.1	2.58	mg/L	0.024	2.58 mg/L	0.024	0.95%
	QC value within limits for Mo Recovery = 103.29%						
Na†	120136.2	24.7	mg/L	0.10	24.7 mg/L	0.10	0.39%
	QC value within limits for Na Recovery = 98.94%						
Ni†	60157.5	2.69	mg/L	0.022	2.69 mg/L	0.022	0.83%
	QC value within limits for Ni Recovery = 107.42%						
Pb†	12780.1	2.68	mg/L	0.005	2.68 mg/L	0.005	0.20%
	QC value within limits for Pb Recovery = 107.11%						
V†	459081.8	2.58	mg/L	0.009	2.58 mg/L	0.009	0.36%
	QC value within limits for V Recovery = 103.35%						
Zn†	126648.5	2.68	mg/L	0.019	2.68 mg/L	0.019	0.71%
	QC value within limits for Zn Recovery = 107.26%						

All analyte(s) passed QC.



Sequence No.: 98  
 Sample ID: ECV  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 4  
 Date Collected: 2/12/2008 01:07:16  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

## Mean Data: ECV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	454192.4	90.5	%	0.31			0.35%
Yr	239197.3	95.5	%	0.21			0.22%
Ag†	305132.4	1.02	mg/L	0.005	1.02 mg/L	0.005	0.48%
	QC value within limits for Ag	Recovery = 101.51%					
Al†	22737.1	5.20	mg/L	0.066	5.20 mg/L	0.066	1.26%
	QC value within limits for Al	Recovery = 104.04%					
B_†	85227.0	2.61	mg/L	0.006	2.61 mg/L	0.006	0.25%
	QC value within limits for B_	Recovery = 104.54%					
Ba†	389309.3	5.26	mg/L	0.015	5.26 mg/L	0.015	0.29%
	QC value within limits for Ba	Recovery = 105.23%					
Be†	6705404.5	2.16	mg/L	0.005	2.16 mg/L	0.005	0.22%
	QC value within limits for Be	Recovery = 107.85%					
Ca†	310120.0	51.5	mg/L	0.20	51.5 mg/L	0.20	0.39%
	QC value within limits for Ca	Recovery = 102.95%					
Cd†	57230.7	2.11	mg/L	0.002	2.11 mg/L	0.002	0.09%
	QC value within limits for Cd	Recovery = 105.74%					
Co†	138642.8	5.30	mg/L	0.013	5.30 mg/L	0.013	0.24%
	QC value within limits for Co	Recovery = 106.01%					
Cr†	424510.9	5.27	mg/L	0.011	5.27 mg/L	0.011	0.20%
	QC value within limits for Cr	Recovery = 105.35%					
Cu†	2160667.5	5.21	mg/L	0.046	5.21 mg/L	0.046	0.87%
	QC value within limits for Cu	Recovery = 104.27%					
Fe†	4306.6	5.23	mg/L	0.020	5.23 mg/L	0.020	0.37%
	QC value within limits for Fe	Recovery = 104.51%					
K†	63401.3	50.6	mg/L	0.48	50.6 mg/L	0.48	0.95%
	QC value within limits for K	Recovery = 101.29%					
Mg†	123184.7	51.4	mg/L	0.45	51.4 mg/L	0.45	0.87%
	QC value within limits for Mg	Recovery = 102.82%					
Mn†	3074360.2	5.33	mg/L	0.046	5.33 mg/L	0.046	0.85%
	QC value within limits for Mn	Recovery = 106.67%					
Mo†	64609.2	5.20	mg/L	0.011	5.20 mg/L	0.011	0.21%
	QC value within limits for Mo	Recovery = 103.98%					
Na†	241558.3	49.7	mg/L	0.32	49.7 mg/L	0.32	0.64%
	QC value within limits for Na	Recovery = 99.47%					
Ni†	119543.1	5.34	mg/L	0.002	5.34 mg/L	0.002	0.04%
	QC value within limits for Ni	Recovery = 106.73%					
Pb†	25404.5	5.32	mg/L	0.005	5.32 mg/L	0.005	0.10%
	QC value within limits for Pb	Recovery = 106.46%					
V†	926509.4	5.21	mg/L	0.044	5.21 mg/L	0.044	0.85%
	QC value within limits for V	Recovery = 104.30%					
Zn†	253106.6	5.36	mg/L	0.012	5.36 mg/L	0.012	0.23%
	QC value within limits for Zn	Recovery = 107.18%					

All analyte(s) passed QC.

Sequence No.: 99  
 Sample ID: ECB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/12/2008 01:10:29  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ECB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	493505.1	98.4 %	0.40			0.41%
Yr	245264.5	97.9 %	0.20			0.20%
Ag†	-41.7	-0.00014 mg/L	0.000117	-0.00014 mg/L	0.000117	83.94%
	QC value within limits for Ag Recovery = Not calculated					
Al†	-10.9	-0.00248 mg/L	0.011456	-0.00248 mg/L	0.011456	461.34%
	QC value within limits for Al Recovery = Not calculated					
B_†	926.4	0.0285 mg/L	0.00091	0.0285 mg/L	0.00091	3.19%
	QC value greater than the upper limit for B Recovery = Not calculated					
Ba†	-25.2	-0.00034 mg/L	0.000126	-0.00034 mg/L	0.000126	36.93%
	QC value within limits for Ba Recovery = Not calculated					
Be†	-187.1	-0.00006 mg/L	0.000010	-0.00006 mg/L	0.000010	16.74%
	QC value within limits for Be Recovery = Not calculated					
Ca†	-80.0	-0.0133 mg/L	0.00057	-0.0133 mg/L	0.00057	4.31%
	QC value within limits for Ca Recovery = Not calculated					
Cd†	-4.1	-0.00015 mg/L	0.000039	-0.00015 mg/L	0.000039	25.25%
	QC value within limits for Cd Recovery = Not calculated					
Co†	-13.7	-0.00052 mg/L	0.000008	-0.00052 mg/L	0.000008	1.58%
	QC value within limits for Co Recovery = Not calculated					
Cr†	7.4	0.00009 mg/L	0.000004	0.00009 mg/L	0.000004	3.87%
	QC value within limits for Cr Recovery = Not calculated					
Cu†	-525.7	-0.00127 mg/L	0.000141	-0.00127 mg/L	0.000141	11.13%
	QC value within limits for Cu Recovery = Not calculated					
Fe†	1.7	0.00200 mg/L	0.001667	0.00200 mg/L	0.001667	83.21%
	QC value within limits for Fe Recovery = Not calculated					
K†	29.9	0.0239 mg/L	0.05616	0.0239 mg/L	0.05616	234.75%
	QC value within limits for K Recovery = Not calculated					
Mg†	-58.3	-0.0243 mg/L	0.00222	-0.0243 mg/L	0.00222	9.12%
	QC value within limits for Mg Recovery = Not calculated					
Mn†	-234.5	-0.00041 mg/L	0.000023	-0.00041 mg/L	0.000023	5.64%
	QC value within limits for Mn Recovery = Not calculated					
Mo†	22.6	0.00182 mg/L	0.000294	0.00182 mg/L	0.000294	16.20%
	QC value within limits for Mo Recovery = Not calculated					
Na†	134.0	0.0276 mg/L	0.00295	0.0276 mg/L	0.00295	10.69%
	QC value within limits for Na Recovery = Not calculated					
Ni†	-5.4	-0.00024 mg/L	0.000054	-0.00024 mg/L	0.000054	22.40%
	QC value within limits for Ni Recovery = Not calculated					
Pb†	-7.5	-0.00157 mg/L	0.000436	-0.00157 mg/L	0.000436	27.82%
	QC value within limits for Pb Recovery = Not calculated					
V†	-10.4	-0.00006 mg/L	0.000012	-0.00006 mg/L	0.000012	20.36%
	QC value within limits for V Recovery = Not calculated					
Zn†	-150.7	-0.00321 mg/L	0.000020	-0.00321 mg/L	0.000020	0.62%
	QC value within limits for Zn Recovery = Not calculated					
QC Failed. Retry.						

Sequence No.: 100  
 Sample ID: ECB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/12/2008 01:13:02  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ECB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	489329.0	97.5 %	0.41			0.42%
Yr	247266.5	98.7 %	0.03			0.03%
Ag†	15.2	0.00005 mg/L	0.000088	0.00005 mg/L	0.000088	174.55%
	QC value within limits for Ag Recovery = Not calculated					
Al†	3.2	0.00073 mg/L	0.008065	0.00073 mg/L	0.008065	>999.9%

B_†	QC value within limits for Al	747.2	0.0230 mg/L	0.00035	0.0230 mg/L	0.00035	1.50%
Baf	QC value greater than the upper limit for B	-26.8	-0.00036 mg/L	0.000045	-0.00036 mg/L	0.000045	12.48%
Bef	QC value within limits for Ba	-141.8	-0.00005 mg/L	0.000006	-0.00005 mg/L	0.000006	12.84%
Ca†	QC value within limits for Be	-83.6	-0.0139 mg/L	0.00194	-0.0139 mg/L	0.00194	13.98%
Cd†	QC value within limits for Ca	-0.8	-0.00003 mg/L	0.000015	-0.00003 mg/L	0.000015	50.74%
Cof	QC value within limits for Cd	-4.7	-0.00018 mg/L	0.000013	-0.00018 mg/L	0.000013	7.22%
Crf	QC value within limits for Co	6.7	0.00008 mg/L	0.000038	0.00008 mg/L	0.000038	45.08%
Cuf	QC value within limits for Cr	-536.7	-0.00129 mg/L	0.000056	-0.00129 mg/L	0.000056	4.30%
Fef	QC value within limits for Cu	1.8	0.00217 mg/L	0.002506	0.00217 mg/L	0.002506	115.68%
K†	QC value within limits for Fe	1.1	0.00089 mg/L	0.040151	0.00089 mg/L	0.040151	>999.9%
Mgf	QC value within limits for K	-59.1	-0.0247 mg/L	0.00095	-0.0247 mg/L	0.00095	3.87%
Mnf	QC value within limits for Mg	-271.5	-0.00047 mg/L	0.000010	-0.00047 mg/L	0.000010	2.09%
Mof	QC value within limits for Mn	9.9	0.00079 mg/L	0.000115	0.00079 mg/L	0.000115	14.54%
Naf	QC value within limits for Mo	67.4	0.0139 mg/L	0.00032	0.0139 mg/L	0.00032	2.29%
Nif	QC value within limits for Na	-0.3	-0.00001 mg/L	0.000266	-0.00001 mg/L	0.000266	>999.9%
Pbf	QC value within limits for Ni	-5.9	-0.00123 mg/L	0.000371	-0.00123 mg/L	0.000371	30.28%
V†	QC value within limits for Pb	-54.5	-0.00030 mg/L	0.000212	-0.00030 mg/L	0.000212	69.58%
Znf	QC value within limits for V	-155.0	-0.00330 mg/L	0.000054	-0.00330 mg/L	0.000054	1.63%
	QC value within limits for Zn						

Sequence No.: 101  
 Sample ID: ECB  
 Analyst:  
 Initial Sample Wt:  
 Dilution:

Autosampler Location: 0  
 Date Collected: 2/12/2008 01:15:35  
 Data Type: Original  
 Initial Sample Vol:  
 Sample Prep Vol:

Mean Data: ECB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	490641.0	97.8 %	0.74			0.76%
Yr	243406.5	97.1 %	0.37			0.38%
Ag†	3.0	0.00001 mg/L	0.000003	0.00001 mg/L	0.000003	25.65%
		QC value within limits for Ag	Recovery = Not calculated			
Al†	7.1	0.00164 mg/L	0.005225	0.00164 mg/L	0.005225	319.42%
		QC value within limits for Al	Recovery = Not calculated			
B_†	663.7	0.0204 mg/L	0.00000	0.0204 mg/L	0.00000	0.02%
		QC value greater than the upper limit for B	Recovery = Not calculated			
Baf	-27.1	-0.00037 mg/L	0.000077	-0.00037 mg/L	0.000077	20.95%
		QC value within limits for Ba	Recovery = Not calculated			
Bef	-95.3	-0.00003 mg/L	0.000002	-0.00003 mg/L	0.000002	5.41%
		QC value within limits for Be	Recovery = Not calculated			
Ca†	-80.3	-0.0133 mg/L	0.00054	-0.0133 mg/L	0.00054	4.05%
		QC value within limits for Ca	Recovery = Not calculated			
Cd†	-0.7	-0.00003 mg/L	0.000187	-0.00003 mg/L	0.000187	702.75%
		QC value within limits for Cd	Recovery = Not calculated			
Cof	-8.6	-0.00033 mg/L	0.000151	-0.00033 mg/L	0.000151	45.64%
		QC value within limits for Co	Recovery = Not calculated			
Crf	-1.9	-0.00002 mg/L	0.000024	-0.00002 mg/L	0.000024	99.59%
		QC value within limits for Cr	Recovery = Not calculated			
Cuf	-603.1	-0.00145 mg/L	0.000013	-0.00145 mg/L	0.000013	0.89%
		QC value within limits for Cu	Recovery = Not calculated			

Fet	-0.7	-0.00091 mg/L	0.001831	-0.00091 mg/L	0.001831	202.23%
	QC value within limits for Fe Recovery = Not calculated					
Kt	-46.7	-0.0373 mg/L	0.01450	-0.0373 mg/L	0.01450	38.90%
	QC value within limits for K Recovery = Not calculated					
Mgt	-57.9	-0.0242 mg/L	0.00037	-0.0242 mg/L	0.00037	1.52%
	QC value within limits for Mg Recovery = Not calculated					
Mnt	-278.8	-0.00048 mg/L	0.000008	-0.00048 mg/L	0.000008	1.62%
	QC value within limits for Mn Recovery = Not calculated					
Mot	6.8	0.00055 mg/L	0.000227	0.00055 mg/L	0.000227	41.33%
	QC value within limits for Mo Recovery = Not calculated					
Nat	42.1	0.00866 mg/L	0.011496	0.00866 mg/L	0.011496	132.75%
	QC value within limits for Na Recovery = Not calculated					
Nit	-8.0	-0.00036 mg/L	0.000100	-0.00036 mg/L	0.000100	28.16%
	QC value within limits for Ni Recovery = Not calculated					
Pbt	-13.4	-0.00281 mg/L	0.000608	-0.00281 mg/L	0.000608	21.65%
	QC value within limits for Pb Recovery = Not calculated					
Vt	-17.9	-0.00010 mg/L	0.000035	-0.00010 mg/L	0.000035	34.56%
	QC value within limits for V Recovery = Not calculated					
Znt	-152.2	-0.00324 mg/L	0.000077	-0.00324 mg/L	0.000077	2.36%
	QC value within limits for Zn Recovery = Not calculated					
QC Failed. Continue with analysis.						

=====  
Analytical Sequence  
Method: 200.7&6010\_070703

Seq.	Loc.	ID	Status
1	0	Calib Blank 1	
2	15	Standard 2	
3	15	ICV	
4	9	LINEARITY	
5	10	ICSA	
6	11	ICSAB	
7	0	Wash	
8	12	QC-25 1ppm	QC Passed
9	4	CCV	QC Passed
10	0	ICB	QC Failed
11	0	ICB	QC Passed
12	20	MRL	QC Passed
13	16	MRL/2	Analyzed
14	17	MRL/5	Analyzed
15	18	FILTERCHECK	Analyzed
16	38	MBLANK	Analyzed
17	39	LCS	Analyzed
18	40	LCSD	Analyzed
19	41	2802010008	Analyzed
20	42	2802010008MS	Analyzed
21	43	2802010008MSD	Analyzed
22	44	2802050265_2X	Analyzed
23	4	CCV	QC Passed
24	0	CCB	QC Failed
25	0	CCB	QC Failed
26	0	CCB	QC Failed
27	45	2802050757	Analyzed
28	46	2801300506	Analyzed
29	47	2801300508	Analyzed
30	48	2801300509	Analyzed
31	49	2801300512_2X	Analyzed
32	50	2801300515	Analyzed
33	51	2801300516	Analyzed
34	52	2802050266	Analyzed
35	53	2802050560	Analyzed
36	54	2802050560MS	Analyzed
37	4	CCV	QC Passed
38	0	CCB	QC Failed
39	0	CCB	QC Failed
40	0	CCB	QC Failed
41	5	MCV	QC Passed
42	55	2802050560MSD	Analyzed
43	56	2802050267	Analyzed
44	57	2802050658	Analyzed
45	58	2802050386	Analyzed
46	59	2802050566	Analyzed
47	60	2802050567	Analyzed
48	61	2802050700	Analyzed
49	62	2802050291	Analyzed
50	63	2802050694	Analyzed
51	64	2802050699	Analyzed
52	4	CCV	QC Passed
53	0	CCB	QC Failed
54	0	CCB	QC Failed
55	0	CCB	QC Passed
56	65	MBLANK	Analyzed
57	21	MRL	Analyzed
58	66	LCS	Analyzed
59	67	LCSD	Analyzed
60	68	2802080108	Analyzed
61	69	2802080108MS	Analyzed
62	70	2802080108MSD	Analyzed
63	71	2802080111	Analyzed
64	72	2802080112	Analyzed
65	73	2802080113	Analyzed
66	4	CCV	QC Passed
67	0	CCB	QC Failed

68	0	CCB	QC Passed ✓
69	5	MCV	QC Passed
70	74	2802080114	Analyzed
71	75	2802080115	Analyzed
72	76	2802080116	Analyzed
73	77	2802080117	Analyzed
74	78	2802080118	Analyzed
75	79	2802080119	Analyzed
76	80	2801150171	Analyzed
77	81	2801150171MS	Analyzed
78	82	2801150171MSD	Analyzed
79	83	2802060676	Analyzed
80	4	CCV	QC Passed
81	0	CCB	QC Failed
82	0	CCB	QC Passed ✓
83	84	2802060679	Analyzed
84	85	D801300513_2X	Analyzed
85	86	2802050238	Analyzed
86	87	2802050246	Analyzed
87	88	2802050247	Analyzed
88	89	2802070100	Analyzed
89	90	2802070104	Analyzed
90	91	2802070106	Analyzed
91	92	2802060371_2X	Analyzed
92	93	2802050696_10X	Analyzed
93	4	CCV	QC Passed
94	0	CCB	QC Failed
95	0	CCB	QC Passed ✓
96	5	MCV	QC Passed
97	94	2802060371	Analyzed
98	4	ECV	QC Passed
99	0	ECB	QC Failed
100	0	ECB	QC Failed
101	0	ECB	QC Failed ✓ <i>dc</i>

**Standard  
Preparation  
Worksheet  
&  
Certificate of  
Analysis**

Reagent Lot #  
 HNO3 R# 100450 HCL R# 100446  
 IS = Yttrium(ME0709008) 0.75mL + Scandium (ME0710007) 0.5mL to 1000mL w/ 2% HNO3

Standards	Lot #	Exp. Date	Dilution
Calibration	ME0712001	(12/01/08)	1:10 ME0801001
(Prepare daily)	ME0712001	(12/01/08)	1:10
CCV/MCV/ECV	ME0710008	(04/17/09)	CCV/ECV 1:20 ME0801002
(Prepare daily)			MCV 1:40 ME0801003
Spike/LCS	ME0709009	(03/11/09)	1:100 ME0801005
(Prepare daily)	ME0801004	(07/11/08)	1:100
	ME0709007	(08/16/08)	1:200
MRL	ME0801007	(07/11/08)	1:100 ME0801008
(Prepare daily)			
ICSA	ME0712003	(06/01/08)	
ICSAB	ME0712004	(06/01/08)	
QCS	ME0610005	(04/10/08)	
1ppm Check	ME0801010	(07/11/08)	
Linearity	ME0711002	(05/06/08)	
Method Sr/Ti/Sn/SiO2			
Calibration	ME0801012	(07/11/08)	
CCV/ECV	ME0801013	(03/31/08)	
QCS	ME0801012	(07/11/08)	
Spike/LCS	ME0801015	(03/31/08)	1:100
(Prepare daily)			
MRL	ME0801014	(07/11/08)	1:100
(Prepare daily)			
Method Li			
Std/ICV/MRL	ME0801009	(07/11/08)	1:1000, 200, 40, 10
(Prepare daily)			
QCS	ME0801011	(07/11/08)	1:10
(Prepare daily)			
LCS/Spike	ME0801011	(07/11/08)	1:50
(Prepare daily)			
ccv	ME0801011	(07/11/08)	1:40
(Prepare daily)			

From May 2005: the calibration std for ICP should be ME0505010,011 not ME0408010



dilution should be 1:20 and 1:40 not 1:200 and 1:400. 1/10/2006.

Reagent Lot #  
 HNO3 R# 100450 HCL R# 100446  
 IS = Yttrium(ME0709008)0.75mL + Scandium (ME0710007)0.5mL to 1000mL w/ 2% HNO3

Standards	Lot #	Exp. Date	Dilution
Calibration	ME0712001	(12/01/08)	1:10 ME0801001
(Prepare daily)	ME0712001	(12/01/08)	1:10
CCV/MCV/ECV	ME0710008	(04/17/09)	CCV/ECV 1:20 ME0801002
(Prepare daily)			MCV 1:40 ME0801003
Spike/LCS	ME0709009	(03/11/09)	1:100 ME0801005
(Prepare daily)	ME0801004	(07/11/08)	1:100
	ME0709007	(08/16/08)	1:200
MRL	ME0801007	(07/11/08)	1:100 ME0801008
(Prepare daily)			
ICSA	ME0712003	(06/01/08)	
ICSAB	ME0712004	(06/01/08)	
QCS	ME0610005	(04/10/08)	
1ppm Check	ME0801010	(07/11/08)	
Linearity	ME0711002	(05/06/08)	

Method Sr/Ti/Sn/SiO2

Calibration	ME0801012	(07/11/08)	
CCV/ECV	ME0801013	(03/31/08)	
QCS	ME0801012	(07/11/08)	
Spike/LCS	ME0801015	(03/31/08)	1:100
(Prepare daily)			
MRL	ME0801014	(07/11/08)	1:100
(Prepare daily)			
Method Li			
Std/ICV/MRL	ME0801009	(07/11/08)	1:1000, 200, 40, 10
(Prepare daily)			
QCS	ME0801011	(07/11/08)	1:10
(Prepare daily)			
LCS/Spike	ME0801011	(07/11/08)	1:50
(Prepare daily)			
ccv	ME0801011	(07/11/08)	1:40
(Prepare daily)			

From May 2005: the calibration std for ICP should be ME0505010,011 not ME0408010

dilution should be 1:20 and 1:40 not 1:200 and 1:400. 1/10/2006.

Initial: WJ  
Date: 11/1/08

## METALS STANDARD DOCUMENTATION

Standard: ICP Calibration STD  
Date Received/Prepped: Prep Daily  
Date Expired: 12/1/2008  
Manufacturer: MWH-wbh  
Matrix: 2% HNO3 + 5% HCl  
Amount:

ME #: 0801001  
By: wbh  
Lot #:  
Certificate: NO  
NIST SRM:  
Storage: Room Temp

Component	Comment	Conc. Unit:
Mo	1:10 ME0712002	10 ug/ml
Sb		10 ug/ml
Sn		10 ug/ml
Ti		10 ug/ml
B		5 ug/ml
Ca	1:10 ME0712001	100 ug/ml
K		100 ug/ml
Mg		100 ug/ml
Na		100 ug/ml
Al		10 ug/ml
As		10 ug/ml
Ba		10 ug/ml
Co		10 ug/ml
Cr		10 ug/ml
Cu		10 ug/ml
Fe		10 ug/ml
Mn		10 ug/ml
Ni		10 ug/ml
Pb		10 ug/ml
Se		10 ug/ml
Tl		10 ug/ml
V		10 ug/ml
Zn		10 ug/ml
Cd		5 ug/ml
Be		4 ug/ml
SR		3 ug/ml
Ag		2 ug/ml

Initial: STE  
Date: 10/01/07

### METALS STANDARD DOCUMENTATION

**Standard:** ICPCalibration Stock Std #1 **ME #:** 0712001  
**Date Received/Prepped:** 12/1/2007 **By:** STE  
**Date Expired:** 12/1/2008 **Lot #:** A2-MEB243151  
**Manufacturer:** Inorganic Ventures **Certificate:** Y  
**Matrix:** 5% Nitric Acid **NIST SRM:** Varies  
**Amount:** 500 mL **Storage:** Room Temp

Component	Comment	Conc. Unit:
Ca	(P/N MWH-ICAP-CAL-1)	1000 ug/ml
K		1000 ug/ml
Mg		1000 ug/ml
Na		1000 ug/ml
Al		100 ug/ml
As		100 ug/ml
Ba		100 ug/ml
Co		100 ug/ml
Cr		100 ug/ml
Cu		100 ug/ml
Fe		100 ug/ml
Mn		100 ug/ml
Ni		100 ug/ml
Pb		100 ug/ml
Se		100 ug/ml
Tl		100 ug/ml
V		100 ug/ml
Zn		100 ug/ml
Cd		50 ug/ml
Be		40 ug/ml
SR		30 ug/ml
Ag		20 ug/ml

**1.0 INORGANIC VENTURES** is an ISO Guide 34:2000 registered Certified Reference Material (CRM) Manufacturer (Certificate #883-02). The certificate is designed and the data is determined in accordance with ISO Guide 31:2000 (Reference Materials-Contents of Certificates and Labels), ISO Guide 34:2000 "Quality System Guidelines for the Production of Reference Materials," and ISO Guide 35-1989 "Certification of Reference Materials - General and Statistical Principles."

**2.0 DESCRIPTION OF CRM** Custom Solution  
 Catalog No.: MWH-ICAP-CAL-1  
 Lot Number: **A2-MEB243151**  
 Matrix: 5% HNO<sub>3</sub>(abs)

**ME 0712001**

1,000.00 µg/mL ea:

Ca, K, Mg, Na,

100.00 µg/mL ea:

Al, As, Ba, Co, Cr<sub>3</sub>, Cu, Fe, Mn, Ni, Pb, Se, Tl, V, Zn,

50.00 µg/mL ea:

Cd,

40.00 µg/mL ea:

Be,

30.00 µg/mL ea:

Sr,

20.00 µg/mL ea:

Ag

**3.0 CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	100.4 ± 0.3 µg/mL	Arsenic, As	100.1 ± 0.3 µg/mL	Barium, Ba	99.6 ± 0.4 µg/mL
Beryllium, Be	40.04 ± 0.08 µg/mL	Cadmium, Cd	50.15 ± 0.12 µg/mL	Calcium, Ca	1,000 ± 2 µg/mL
Chromium+3, Cr <sub>3</sub>	100.0 ± 0.2 µg/mL	Cobalt, Co	99.9 ± 0.2 µg/mL	Copper, Cu	100.0 ± 0.2 µg/mL
Iron, Fe	99.6 ± 0.1 µg/mL	Lead, Pb	100.0 ± 0.3 µg/mL	Magnesium, Mg	1,000 ± 4 µg/mL
Manganese, Mn	100.0 ± 0.3 µg/mL	Nickel, Ni	100.0 ± 0.3 µg/mL	Potassium, K	1,001 ± 5 µg/mL
Selenium, Se	100.0 ± 0.2 µg/mL	Silver, Ag	20.04 ± 0.02 µg/mL	Sodium, Na	1,002 ± 5 µg/mL
Strontium, Sr	30.04 ± 0.18 µg/mL	Thallium, Tl	99.7 ± 0.1 µg/mL	Vanadium, V	100.0 ± 0.3 µg/mL
Zinc, Zn	100.0 ± 0.3 µg/mL				

Certified Density: 1.055 g/mL (measured at 22° C)

Initial: STE  
Date: 12/1/07

## METALS STANDARD DOCUMENTATION

**Standard:** ICP Calibration Stock Std #2  
**Date Received/Prepped:** 12/1/2007  
**Date Expired:** 12/1/2008  
**Manufacturer:** Inorganic Ventures  
**Matrix:** 5% Nitric Acid + Trace HF  
**Amount:** 500 mL

**ME #: 0712002**  
**By: STE**  
**Lot #: A2-MEB243152**  
**Certificate: Y**  
**NIST SRM: Varies**  
**Storage: Room Temp**

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
Mo	(P/N MWH-ICAP-CAL-2)	100 ug/ml
Sb		100 ug/ml
Sn		100 ug/ml
Ti		100 ug/ml
B		50 ug/ml
Mo		100 ug/ml

**1.0 INORGANIC VENTURES** is an ISO Guide 34:2000 registered Certified Reference Material (CRM) Manufacturer (Certificate #883-02). The certificate is designed and the data is determined in accordance with ISO Guide 31:2000 (Reference Materials-Contents of Certificates and Labels), ISO Guide 34:2000 "Quality System Guidelines for the Production of Reference Materials," and ISO Guide 35-1989 "Certification of Reference Materials - General and Statistical Principles."

**2.0 DESCRIPTION OF CRM** Custom Solution  
 Catalog No.: MWH-ICAP-CAL-2  
 Lot Number: **A2-MEB243152**  
 Matrix: tr. HF, 5% HNO<sub>3</sub>(abs)

**ME 0712 002**

100.00 µg/mL ea:  
 Mo, Sb, Sn, Ti.

50.00 µg/mL ea:  
 B

### 3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	100.4 ± 0.3 µg/mL	Boron, B	49.85 ± 0.20 µg/mL	Molybdenum, Mo	100.2 ± 0.3 µg/mL
Tin, Sn	100.2 ± 0.3 µg/mL	Titanium, Ti	100.4 ± 0.2 µg/mL		

**Certified Density:** 1.037 g/mL (measured at 22° C)

The Certified Value is based upon the most precise method used to analyze this CRM. The following equations are used in the calculation of the certified value and the uncertainty:

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

$(\bar{x})$  = mean

$x_i$  = individual results

$n$  = number of measurements

$$\text{Uncertainty } (\pm) = \frac{2\{(\sum s_i)^2\}^{1/2}}{(n)^{1/2}}$$

$\sum s_i$  = The summation of all significant estimated errors

(Most common are the errors from instrumental measurement, weighing, dilution to volume, and the fixed error reported on the NIST SRM certificate of analysis.)

### 4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

"Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.



Initial: STE  
Date: 10/19/07

## METALS STANDARD DOCUMENTATION

**Standard:** ICP CCV/MCV/QCS Stock Standard  
**Date Received/Prepped:** 10/19/2007  
**Date Expired:** 4/17/2009  
**Manufacturer:** CPI  
**Matrix:** 5% HNO<sub>3</sub> = tr HF  
**Amount:** 100 mL x 10

**ME #:** 0710008  
**By:** STE  
**Lot #:** 07J154  
**Certificate:** Y  
**NIST SRM:** Various  
**Storage:** Room Temp

Component	Comment	Conc. Unit:
Ag	P/N 4400-061003RH01	20 ppm
Al		100 ppm
As		100 ppm
B		50 ppm
Ba		100 ppm
bE		40 ppm
Ca		1000 ppm
Cd		50 ppm
Co		100 ppm
Cr		100 ppm
Cu		100 ppm
Fe		100 ppm
K		1000 ppm
Mg		1000 ppm
Mn		100 ppm
Mo		100 ppm
Na		1000 ppm
Ni		100 ppm
Pb		100 ppm
Sb		100 ppm
Se		100 ppm
Tl		100 ppm
V		100 ppm
Zn		100 ppm
Sr		20 ppm
Sn		20 ppm
Ti		20 ppm



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Expiry: 4/17/2009

# Certificate of Analysis

**Part Number: 4400-061003RH01**  
**Lot Number: 07J154**  
**Shelf Life: 18 months**

ME 071003E  
 rec'd: 10/19/08  
 STE

MWH  
 Custom Multi  
 5% HNO3 + tr HF

Concentrations in ug/mL ± 0.5%

Ag	20	K	1000	Sr	20
Al	100	Mg	1000	Sn	20
As	100	Mn	100	Ti	20
B	50	Mo	100		
Ba	100	Na	1000		
Be	40	Ni	100		
Ca	1000	Pb	100		
Cd	50	Sb	100		
Co	100	Se	100		
Cr	100	TL	100		
Cu	100	V	100		
Fe	100	Zn	100		

This standard solution was prepared using high-purity starting materials, high-purity acid (if required) and 18-megaohm de-ionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

Starting materials were analyzed at 1000µg/mL by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against the National Institute of Standards and Technology's SRM 3100 series, NIST approved second source and/or gravimetrically.

Accuracy and stability are guaranteed to within plus or minus 0.5% of the certified value for the stated shelf life from the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the USA, +31 20 638 05 97 in Europe or visit our web-site at www.cpiinternational.com.

Initial:

WJy

Date:

11/10/08

# METALS STANDARD DOCUMENTATION

<b>Standard:</b>	ICP MCV Working Standard	<b>ME #:</b> 0801003
<b>Date Received/Prepped:</b>	Daily	<b>By:</b> Wbh
<b>Date Expired:</b>	4/17/2009	<b>Lot #:</b>
<b>Manufacturer:</b>	CPI	<b>Certificate:</b> Y
<b>Matrix:</b>	2% HNO <sub>3</sub> + 5% HCL	<b>NIST SRM:</b> Various
<b>Amount:</b>	100 mL	<b>Storage:</b> Room Temp

Component	Comment	Conc. Unit:
Ag	5ml ME0710008 / 100mL	0.5 ppm
Al		2.5 ppm
As		2.5 ppm
B		1.25 ppm
Ba		2.5 ppm
bE		1 ppm
Ca		25 ppm
Cd		1 ppm
Co		2.5 ppm
Cr		2.5 ppm
Cu		2.5 ppm
Fe		2.5 ppm
K		25 ppm
Mg		25 ppm
Mn		2.5 ppm
Mo		2.5 ppm
Na		25 ppm
Ni		2.5 ppm
Pb		2.5 ppm
Sb		2.5 ppm
Se		2.5 ppm
Tl		2.5 ppm
V		2.5 ppm
Zn		2.5 ppm
Sr		0.5 ppm
Sn		0.5 ppm
Ti		0.5 ppm

Initial:

Date:

WBJ  
4/17/09

### METALS STANDARD DOCUMENTATION

Standard: ICP CCV/ECV Working Standard  
 Date Received/Prepped: Daily  
 Date Expired: 4/17/2009  
 Manufacturer: CPI  
 Matrix: 2% HNO<sub>3</sub> + 5% HCL  
 Amount: 100 mL

ME #: 0801002  
 By: Wbh  
 Lot #:  
 Certificate: Y  
 NIST SRM: Various  
 Storage: Room Temp

Component	Comment	Conc. Unit:
Ag	5ml ME0710008 / 100mL	1 ppm
Al		5 ppm
As		5 ppm
B		2.5 ppm
Ba		5 ppm
bE		2 ppm
Ca		50 ppm
Cd		2 ppm
Co		5 ppm
Cr		5 ppm
Cu		5 ppm
Fe		5 ppm
K		50 ppm
Mg		50 ppm
Mn		5 ppm
Mo		5 ppm
Na		50 ppm
Ni		5 ppm
Pb		5 ppm
Sb		5 ppm
Se		5 ppm
Tl		5 ppm
V		5 ppm
Zn		5 ppm
Sr		1 ppm
Sn		1 ppm
Ti		1 ppm

Initial: WBHDate: 7/11/08

## METALS STANDARD DOCUMENTATION

**Standard:** Spike and LCS std for ICP **ME #:** 0801005  
**Date Received/Prepped:** prep daily **By:** WBH  
**Date Expired:** 7/11/2008 **Lot #:**  
**Manufacturer:** MWH-wbh **Certificate:** N  
**Matrix:** 2% HNO<sub>3</sub> + 5% HCl **NIST SRM:**  
**Amount:** **Storage:** Room Temp

Component	Comment	Conc. Unit:
CA	1:200 ME0709007	50 ppm
K		20 ppm
MG		20 ppm
NA		50 ppm
Iron	1:100 ME0709009	5 mg/L
Aluminum		2 mg/L
Barium		1 mg/L
Cobalt		1 mg/L
Chromium		1 mg/L
Copper		1 mg/L
Molybdenum		1 mg/L
Strontium		1 mg/L
Titanium		1 mg/L
Vanadium		1 mg/L
Zinc		1 mg/L
Tin		1 mg/L
Silver		0.5 mg/L
Boron		0.5 mg/L
Manganese		0.5 mg/L
Nickel		0.5 mg/L
Antimony		0.5 mg/L
Arsenic		0.2 mg/L
Cadmium		0.2 mg/L
Lead		0.2 mg/L
Selenium		0.2 mg/L
Thallium		0.2 mg/L
Uranium		0.2 mg/L
Beryllium		0.05 mg/L
AS	1:100 ME0801004	0.8 mg/L
PB		0.8 mg/L
SE		0.8 mg/L
TL		0.8 mg/L

Initial:

Date:

Wbh

7/11/08

## METALS STANDARD DOCUMENTATION

Standard: ICP Spike Solution  
Date Received/Prepped: 1/11/2008  
Date Expired: 7/11/2008  
Manufacturer: MWH-wbh  
Matrix: 2% HNO<sub>3</sub>  
Amount: 100mL

ME #: 0801004  
By: Wbh  
Lot #: VARIOUS  
Certificate:  
NIST SRM:  
Storage: Room Temp

Component	Comment	Conc.	Unit:
AS	8.0mL ME07090023/100mL	80	ppm
PB	8.0mL ME0704013/100mL	80	ppm
SE	8.0mL ME0703001/100mL	80	ppm
TL	8.0mL ME0702006/100mL	80	ppm

Initial:  
Date:

wbj  
3/12/08

### METALS STANDARD DOCUMENTATION

**Standard:** ICP LCS/SPIKE Solution  
**Date Received/Prepped:** 3/12/2008  
**Date Expired:** 8/12/2008  
**Manufacturer:** MWH-wbh  
**Matrix:** 2% HNO<sub>3</sub> + 5% HCl  
**Amount:** 100mL

**ME #:** 0803001  
**By:** wbj  
**Lot #:**  
**Certificate:** NO  
**NIST SRM:**  
**Storage:** Room Temp

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
Ca	1:4 ME0702002	5000 ug/ml
K	1:10 ME0702005	1000 ug/ml
Mg	1:10 ME0702004	1000 ug/ml
Na	1:4 ME0702003	5000 ug/ml

Initial: STE  
Date: 9/13/07

## METALS STANDARD DOCUMENTATION

**Standard:** ICP CCV/MCV Stock Standard  
**Date Received/Prepped:** 9/13/2007  
**Date Expired:** 3/11/2009  
**Manufacturer:** CPI International  
**Matrix:** 5% HNO<sub>3</sub> AND 0.1% HF  
**Amount:** 100 mL

**ME #:** 0709009  
**By:** STE  
**Lot #:** 071040  
**Certificate:**  
**NIST SRM:**  
**Storage:** Room Temp.

<u>Component</u>	<u>Comment</u>	<u>Conc. Unit:</u>
Fe	P/N 4400-050314RH01	500
Al	(10 bottles)	200
Ba		100
Co		100
Cr		100
Cu		100
Mo		100
Sr		100
Ti		100
V		100
Zn		50
Ag		50
Ba		50
Mn		50
Ni		50
Sb		50
As		20
Cd		20
Pb		20
Se		20
Tl		20
Sn		100
Be		5
U		20





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Expiry: 3/11/2009

# Certificate of Analysis

**Part Number:** 4400-050314RH01  
**Lot Number:** 071040  
**Shelf Life:** 18 months

ME 07 09 009

MWH Labs  
 5% HNO<sub>3</sub> + 0.1% HF  
 #REF!

Concentrations in ug/mL ± 0.5%

Fe	500	B	50
Al	200	Mn	50
Ba	100	Ni	50
Co	100	Sb	50
Cr	100	As	20
Cu	100	Cd	20
Mo	100	Pb	20
Sr	100	Se	20
Ti	100	TL	20
V	100	Sn	100
Zn	100	Be	5
Ag	50	U	20

This standard solution was prepared using high-purity starting materials, high-purity acid (if required) and 18-megaohm de-ionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

Starting materials were analyzed at 1000µg/mL by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against the National Institute of Standards and Technology's SRM 3100 series, NIST approved second source and/or gravimetrically.

Accuracy and stability are guaranteed to within plus or minus 0.5% of the certified value for the stated shelf life from the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the USA, +31 20 638 05 97 in Europe or visit our web-site at [www.cpiinternational.com](http://www.cpiinternational.com).

Initial:

Date:

W By  
2/20/07

## METALS STANDARD DOCUMENTATION

**Standard:** Potassium 10000ppm Stock Std  
**Date Received/Prepped:** 2/20/2007  
**Date Expired:** 8/16/2008  
**Manufacturer:** CPI  
**Matrix:** 1% HNO3  
**Amount:** 250 mL

**ME #:** 0702005  
**By:** WBH  
**Lot #:** 07B056  
**Certificate:** Y  
**NIST SRM:** 3141  
Room temp. storage

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
K	P/N 4400-10M411	10000 ppm



Initial:

Date:

WBH  
2/1/07

## METALS STANDARD DOCUMENTATION

**Standard:** Magnesium 10000ppm Stock Std  
**Date Received/Prepped:** 2/20/2007  
**Date Expired:** 8/16/2008  
**Manufacturer:** CPI  
**Matrix:** 4% HNO3  
**Amount:** 250 mL

**ME #:** 0702004  
**By:** WBH  
**Lot #:** 07B058  
**Certificate:** Y  
**NIST SRM:** 3131  
Room temp. storage

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
Mg	P/N 4400-10M311	10000 ppm



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# CERTIFICATE OF ANALYSIS

**P/N 4400-10M311**

**P/N S4400-10M311**

Single-Element Magnesium Standard

Mg in 4% HNO<sub>3</sub>  
10,000 ± 30 µg/mL

Lot # 07B058

*M 70702004*

Material Source: Magnesium Metal  
Source Purity: 99.99%  
Specific Gravity: 1.056 @ 21 °C

This standard solution was prepared using high-purity metal, sub-boiled distilled nitric acid and 18-megaohm deionized water. The starting material was weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

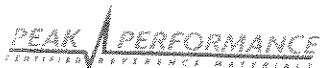
The standard solution concentration was certified by ICP against the National Institute of Standards and Technology's SRM 3131. Trace impurities of the standard solution at 1000 µg/mL were analyzed by ICP-MS.

<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>
Al 28	0.1	Cu 1.6	0.1	Pb 7.7	0.7	K ND	70	Tl 0.91	0.1
Sb ND	0.1	Dy ND	0.1	Li ND	0.4	Pr 0.28	0.1	Th ND	0.1
As ND	6	Er ND	0.1	Lu ND	1	Re ND	0.1	Tm ND	0.1
Ba 0.28	0.1	Eu ND	0.1	Mg X	0.2	Rh ND	0.1	Sn 0.14	0.1
Be ND	0.1	Gd 0.23	0.1	Mn 19.8	1	Rb ND	0.1	Ti ND	0.1
Bi ND	0.1	Ga 0.18	0.1	Hg ND	0.2	Ru ND	0.1	W ND	0.1
B ND	4	Ge ND	0.1	Mo ND	0.1	Sm ND	0.1	U ND	0.1
Br ND	10	Au ND	0.1	Nd 1.1	0.1	Se ND	6	V ND	1
Cd ND	0.1	Hf ND	0.1	Ni 1	0.1	Si 64	20	Yb ND	0.1
Ca ND	7	Ho ND	0.1	Nb ND	0.1	Ag 0.19	0.1	Y 0.2	0.1
Ce 2.1	0.1	I 1	0.2	Os ND	0.1	Na 7.2	1	Zn ND	1
Cs ND	0.1	Ir ND	0.1	Pd ND	0.1	Sr 0.19	0.1	Zr 0.29	0.1
Cr ND	1	Fe 80	30	P ND	10	Ta ND	0.1		
Co ND	0.1	La 0.76	0.1	Pt ND	0.1	Te ND	0.1		

X=Major Element INT=Interference from Major Element ND=Not Detected DL=Detection Limit

Accuracy and stability are guaranteed to within plus or minus 0.3% of the certified value for 18 months after the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the USA or +31 20 638 05 97 in Europe.



Initial:

Date:

U31  
2/20/07

## METALS STANDARD DOCUMENTATION

**Standard:** Sodium 10000ppm Stock Std **ME #:** 0702003  
**Date Received/Prepped:** 2/20/2007 **By:** WBH  
**Date Expired:** 8/16/2008 **Lot #:** 07B057  
**Manufacturer:** CPI **Certificate:** Y  
**Matrix:** 1% HNO3 **NIST SRM:** 3152a  
**Amount:** 250 mL **Room temp. storage**

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
Na	P/N 4400-10M521	10000 ppm



Initial: W37  
Date: 2/20/07

### METALS STANDARD DOCUMENTATION

**Standard:** Calcium 10000ppm Stock Std      **ME #:** 0702002  
**Date Received/Prepped:** 2/20/2007      **By:** WBH  
**Date Expired:** 8/16/2008      **Lot #:** 07B065  
**Manufacturer:** CPI      **Certificate:** Y  
**Matrix:** 4% HNO3      **NIST SRM:** 3109a  
**Amount:** 250 mL      Room temp. storage

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
Ca	P/N 4400-10M91	10000 ppm





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# CERTIFICATE OF ANALYSIS

P/N 4400-10M91  
P/N S4400-10M91

170702602

Single-Element Calcium Standard

Ca in 4% HNO<sub>3</sub>  
10,000 ± 30 µg/mL

Lot # 07B065

Material Source: Calcium Carbonate (CaCO<sub>3</sub>)  
Source Purity: 99.997%  
Specific Gravity: 1.035 @ 21 °C

This standard solution was prepared using high-purity salt, sub-boiled distilled nitric acid and 18-megaohm deionized water. The starting material was weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

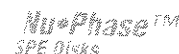
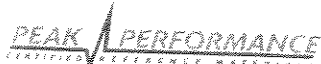
The standard solution concentration was certified by ICP against the National Institute of Standards and Technology's SRM 3109a. Trace impurities of the standard solution at 1000 µg/mL were analyzed by ICP-MS.

	<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>
Al	7	0.1	Cu	1.7	0.1	Pb	0.23	0.1	K	ND	70
Sb	ND	0.1	Dy	ND	0.1	Li	ND	0.4	Pr	ND	0.1
As	ND	6	Er	ND	0.1	Lu	ND	1	Re	ND	0.1
Ba	1.5	0.1	Eu	ND	0.1	Mg	38	0.2	Rh	ND	0.1
Be	ND	0.1	Gd	ND	0.1	Mn	ND	1	Rb	ND	0.1
Bi	ND	0.1	Ga	ND	0.1	Hg	ND	0.2	Ru	ND	0.1
B	1.5	4	Ge	ND	0.1	Mo	ND	0.1	Sm	ND	0.1
Br	ND	10	Au	ND	0.1	Nd	ND	0.1	Se	ND	6
Cd	ND	0.1	Hf	ND	0.1	Ni	3	0.1	Si	47	8
Ca	X	7	Ho	ND	0.1	Nb	ND	0.1	Ag	ND	0.1
Ce	ND	0.1	I	0.27	0.2	Os	ND	0.1	Na	11.6	1
Cs	ND	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	55	0.1
Cr	ND	1	Fe	INT	30	P	ND	10	Ta	ND	0.1
Co	INT	0.1	La	0.41	0.1	Pt	ND	0.1	Te	ND	0.1

INT=Interference from Major Element ND=None Detected X=Major Element DL=Detection Limit

Accuracy and stability are guaranteed to within plus or minus 0.3% of the certified value for 18 months after the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the USA or +31 20 638 05 97 in Europe.



Initial:

Date:

WBH  
2/20/07

## METALS STANDARD DOCUMENTATION

**Standard:** Thallium 1000ppm Stock Std  
**Date Received/Prepped:** 2/20/2007  
**Date Expired:** 8/16/2008  
**Manufacturer:** CPI  
**Matrix:** 2% HNO<sub>3</sub>  
**Amount:** 100 mL

**ME #:** 0702006  
**By:** WBH  
**Lot #:** 06H213  
**Certificate:** Y  
**NIST SRM:** 3158  
Room temp. storage

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
Tl	P/N S4400-1000581	1000 ppm

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M70702006

# CERTIFICATE OF ANALYSIS

**P/N 4400-1000581**  
**P/N S4400-1000581**

Single Element Thallium Standard  
Tl in 2% HNO<sub>3</sub>  
1000 ± 3 µg/mL

Lot # 06H213

Material Source: Thallium metal  
Source Purity: 99.999%  
Specific Gravity: 1.015 @ 21 °C

This standard solution was prepared using high-purity metal, sub-boiled distilled nitric acid and 18-megohm deionized water. The starting material was weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

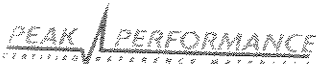
The standard solution concentration was certified by ICP against the National Institute of Standards and Technology's SRM 3158. Trace impurities of the 1000 µg/mL standard were analyzed by ICP-MS.

<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>	<u>Ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>
Al 13.3	0.1	Cu 9.3	0.1	Pb 41	0.1	K ND	70	Tl X	0.1
Sb ND	0.1	Dy ND	0.1	Li ND	0.4	Pr ND	0.1	Th ND	0.1
As ND	6	Er ND	0.1	Lu ND	1	Re ND	0.1	Tm ND	0.1
Ba 0.37	0.1	Eu ND	0.1	Mg 1.7	0.2	Rh ND	0.1	Sn ND	0.1
Be 0.67	0.1	Gd ND	0.1	Mn ND	1	Rb ND	0.1	Ti 0.45	0.1
Bi 0.12	0.1	Ga ND	0.1	Hg 0.16	0.2	Ru ND	0.1	W ND	0.1
B ND	4	Ge ND	0.1	Mo 0.21	0.1	Sm ND	0.1	U ND	0.1
Br ND	10	Au ND	0.1	Nd ND	0.1	Se ND	6	V ND	1
Cd 1.6	0.1	Hf ND	0.1	Ni 1.1	0.1	Si 46	8	Yb ND	0.1
Ca 51	7	Ho ND	0.1	Nb ND	0.1	Ag 0.3	0.1	Y ND	0.1
Ce ND	0.1	I 0.4	0.2	Os ND	0.1	Na 3.3	1	Zn 14.7	2
Cs 0.24	0.1	Ir ND	0.1	Pd ND	0.1	Sr ND	0.1	Zr ND	0.1
Cr ND	1	Fe ND	30	P 20	10	Ta ND	0.1		
Co ND	0.1	La ND	0.1	Pt ND	0.1	Te ND	0.1		

X=Major Element INT=Interference from Major Element DL=Detection Limit ND=None Detected

Accuracy and stability are guaranteed to within plus or minus 0.3% of the certified value for 18 months after the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654.



METALS STANDARD DOCUMENTATION



Initial: W34  
 Date: 3/5/07

123

Component	Comment	Conc. Unit:
Se	P/N # S4400-1000491	1000 ppm
Standard:	Selenium Stock Standard	ME #: 0703001
Date Received/Prepped:	3/5/2007	By: wbn
Date Expired:	8/22/2008	Lot #: 6.00E+228
Manufacturer:	CPI	Certificate: Y
Matrix:	2% HNO3	NIST SRM: 3148
Amount:	100 mL	Storage: Room Temp



Initial: WBH  
Date: 4/16/07

### METALS STANDARD DOCUMENTATION

**Standard:** Lead Stock Standard **ME #:** 0704013  
**Date Received/Prepped:** 4/16/2007 **By:** WBH  
**Date Expired:** 10/11/2008 **Lot #:** 07A097  
**Manufacturer:** CPI **Certificate:** Y  
**Matrix:** 2% HNO3 **NIST SRM:** 3128  
**Amount:** 100 mL Room temp. storage

Component	Comment	Conc. Unit:
Pb	P/N S4400-1000281	1000 ppm



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**CERTIFICATE OF ANALYSIS**

**P/N S4400-1000281**

**P/N 4400-1000281**

Single-Element Lead Standard

Pb in 2% HNO<sub>3</sub>

1000 ± 3 µg/mL

Lot # 07A097

1270704013

Material Source: Lead Metal  
Source Purity: 99.995 %  
Specific Gravity: 1.009 @ 21 °C

This standard solution was prepared using high-purity metal, sub-boiled distilled nitric acid and 18-megaohm deionized water. The starting material was weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

The standard solution concentration was certified by ICP against the National Institute of Standards and Technology's SRM 3128. Trace impurities of the 1000 µg/mL standard were analyzed by ICP-MS.

	<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>
Al	10.3	0.1	Cu	58	0.1	Pb	X	0.1	K	ND	70
Sb	ND	0.1	Dy	ND	0.1	Li	2	0.4	Pr	ND	0.1
As	ND	6	Er	ND	0.1	Lu	ND	1	Re	ND	0.1
Ba	0.22	0.1	Eu	ND	0.1	Mg	1.4	0.2	Rh	IN	0.1
Be	0.58	0.1	Gd	ND	0.1	Mn	3.8	1	Rb	ND	0.1
Bi	0.7	0.1	Ga	ND	0.1	Hg	ND	0.2	Ru	ND	0.1
B	ND	4	Ge	ND	0.1	Mo	0.17	0.1	Sm	ND	0.1
Br	ND	10	Au	ND	0.1	Nd	ND	0.1	Se	ND	6
Cd	ND	0.1	Hf	ND	0.1	Ni	0.9	0.1	Si	31	8
Ca	25	7	Ho	ND	0.1	Nb	ND	0.1	Ag	6.1	0.1
Ce	ND	0.1	I	0.1	0.2	Os	ND	0.1	Na	3.5	1
Cs	0.26	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	ND	0.1
Cr	ND	1	Fe	ND	30	P	ND	10	Ta	ND	0.1
Co	ND	0.1	La	ND	0.1	Pt	ND	0.1	Te	ND	0.1

X=Major Element INT=Interference from Major Element DL=Detection Limit ND=None Detected

Accuracy and stability are guaranteed to within plus or minus 0.3% of the certified value for 18 months after the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the United States or +31 20 638 05 97 in Europe.



ME0709023

Initial:

STE

Date:

9/24/07

## METALS STANDARD DOCUMENTATION

**Standard:** As Stock Standard  
**Date Received/Prepped:** 9/24/2007  
**Date Expired:** 10/1/2008  
**Manufacturer:** Inorganic Ventures  
**Matrix:** 1.4% HNO<sub>3</sub>  
**Amount:** 100 mL X2

**ME #:** 0709023  
**By:** STE  
**Lot #:** A2-AS02035  
**Certificate:** Y  
**NIST SRM:**  
**Storage:** Room Temp

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
As	PN: CGAS1-1	1000 ug/ml



**1.0 INORGANIC VENTURES** is an ISO Guide 34:2000 registered Certified Reference Material (CRM) Manufacturer (Certificate #883-02). The certificate is designed and the data is determined in accordance with ISO Guide 31:2000 (Reference Materials-Contents of Certificates and Labels), ISO Guide 34:2000 "Quality System Guidelines for the Production of Reference Materials," and ISO Guide 35:1989 "Certification of Reference Materials - General and Statistical Principles."

**2.0 DESCRIPTION OF CRM**      **1000 µg/mL Arsenic in 1.4% (abs) HNO<sub>3</sub>**

Catalog Number:            CGAS1-1, CGAS1-2, and CGAS1-5  
 Lot Number:                **A2-AS02035**  
 Starting Material:         As Polycrystalline lump  
 Starting Material Purity (%):    99.998288  
 Starting Material Lot No:    23444  
 Matrix:                     1.4% (abs) HNO<sub>3</sub>

**ME 0709023**

**3.0 CERTIFIED VALUES AND UNCERTAINTIES**

**Certified Concentration:**    1000 ± 6 µg/mL

**Certified Density:**            1.010 g/mL (measured at 22° C)

The Certified Value is the instrument analysis value. The following equations are used in the calculation of the certified value and the uncertainty:

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

( $\bar{x}$ ) = mean

$x_i$  = individual results

$n$  = number of measurements

$$\text{Uncertainty } (\pm) = \frac{2[(\sum s_i)^2]^{1/2}}{(n)^{1/2}}$$

$\sum s_i$  = The summation of all significant estimated errors

(Most common are the errors from instrumental measurement, weighing, dilution to volume, and the fixed error reported on the NIST SRM certificate of analysis.)

**4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS**

"Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

**4.1 Assay Method #1**      **1000 ± 6 µg/mL**  
 ICP Assay NIST SRM 3103a Lot Number: 010713

**Assay Method #2**      **1001 ± 5 µg/mL**  
 Gravimetric NIST SRM Lot Number: See Sec. 4.2

Date: W37  
4/11/08

## METALS STANDARD DOCUMENTATION

Standard: ICP MRL Working Stock Solution ME #: 0801008  
Date Received/Prepped: Daily By: Wbh  
Date Expired: 7/11/2008 Lot #:  
Manufacturer: MWH-wbh Certificate: Y  
5% HNO3 2% HNO3 + 5% Hcl NIST SRM:  
Amount: 100 mL Room temp. storage

Component	Comment	Conc. Unit:
Al	0.1mL ME0801007 / 10mL	0.05 ppm
Sb		0.05 ppm
As		0.1 ppm
Ba		0.02 ppm
Be		0.001 ppm
Ba		0.05 ppm
Cd		0.005 ppm
Ca		1 ppm
Cr		0.01 ppm
Co		0.05 ppm
Cu		0.01 ppm
Fe		0.02 ppm
Pb		0.02 ppm
Li		0.1 ppm
Mg		0.002 ppm
Mn		0.02 ppm
Mo		0.02 ppm
Ni		1 ppm
K		0.1 ppm
Se		0.01 ppm
Ag		1 ppm
Na		0.02 ppm
Tl		0.002 ppm
V		0.1 ppm
Zn		0.001 ppm
Ti		0.02 ppm
Sr		0.01 ppm
Sn		0.2 ppm

Date: 1/11/08

### METALS STANDARD DOCUMENTATION

Standard: ICP MRL Working Stock Solu ME #: 0801007  
Date Received/Prepped: 1/11/2008 By: Wbh  
Date Expired: 7/11/2008 Lot #:  
Manufacturer: MWH-wbh Certificate: Y  
Matrix: 5% HNO3 NIST SRM:  
Amount: 100 mL Room temp. storage

Component	Comment	Conc. Unit:
Al	10mL ME0709020 / 100mL	5 ppm
Sb		5 ppm
As		10 ppm
Ba		2 ppm
Be		0.1 ppm
Ba		5 ppm
Cd		0.5 ppm
Ca		100 ppm
Cr		1 ppm
Co		5 ppm
Cu		1 ppm
Fe		2 ppm
Pb		2 ppm
Li		10 ppm
Mg		0.2 ppm
Mn		2 ppm
Mo		2 ppm
Ni		100 ppm
K		10 ppm
Se		1 ppm
Ag		100 ppm
Na		2 ppm
Tl		0.2 ppm
V		10 ppm
Zn		0.1 ppm
Ti		2 ppm
Sr		1 ppm
Sn		20 ppm

Initial:

STE

Date:

9/19/07

### METALS STANDARD DOCUMENTATION

Standard: ICP MRL Stock Standard  
 Date Received/Prepped: 9/20/2007  
 Date Expired: 9/18/2008  
 Manufacturer: CPI  
 Matrix: 2% HNO3 + tr HF  
 Amount: 100 mL

ME #: 0709020  
 By:  
 Lot #: 061162  
 Certificate: Y  
 NIST SRM:  
 Room temp. storage

Component	Comment	Conc. Unit:
Al	P/N 4400-060915RHO1	50 ppm
Sb		50 ppm
As		100 ppm
Ba		20 ppm
Be		1 ppm
Ba		50 ppm
Cd		5 ppm
Ca		1000 ppm
Cr		10 ppm
Co		50 ppm
Cu		10 ppm
Fe		20 ppm
Pb		20 ppm
Li		1 ppm
Mg		100 ppm
Mn		2 ppm
Mo		20 ppm
Ni		20 ppm
K		1000 ppm
Se		100 ppm
Ag		10 ppm
Na		1000 ppm
Tl		100 ppm
V		2 ppm
Zn		20 ppm
Ti		20 ppm
Sr		10 ppm
Sn		200 ppm



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ME0709020

Expiry 9/18/2008

# Certificate of Analysis

**Part Number: 4400-060915RH01**  
**Lot Number: 061162**  
**Shelf Life: 12 months**

MWH  
 Custom Standard  
 2% HNO3 + tr HF

Concentrations in ug/mL ± 0.5%

Al	50	Pb	20	Zn	20
Si	50	Li	1	Ti	20
As	100	Mg	100	Sr	10
Ba	20	Mn	2	Sn	200
Be	1	Mo	20		
B	50	Ni	20		
Cd	5	K	1000		
Ca	1000	Se	100		
Cr	10	Ag	10		
Co	50	Na	1000		
Cu	10	TL	100		
Fe	20	V	2		

This standard solution was prepared using high-purity starting materials, high-purity acid (if required) and 18-megaohm de-ionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

Starting materials were analyzed at 1000µg/mL by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against the National Institute of Standards and Technology's SRM 3100 series, NIST approved second source and/or gravimetrically.

Accuracy and stability are guaranteed to within plus or minus 0.5% of the certified value for the stated shelf life from the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the USA, +31 20 638 05 97 in Europe or visit our web-site at [www.cpiinternational.com](http://www.cpiinternational.com).

# METALS STANDARD DOCUMENTATION

**Standard:** INTERFERENCE CHECK STANDAF  
**Date Received/Prepped:** 6/1/2008  
**Date Expired:** 12/1/2008  
**Manufacturer:** MWH-CSK  
**Matrix:** 5% HNO3  
**Amount:** 500ML

**ME #:** 0806001  
**By:** CSK  
**Lot #:** various  
**Certificate:**  
**NIST SRM:**  
**Storage:** Room Temp

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
AL	P/N 4400-INTA1-500	250 ppm
CA	25ML IN 500ML	250 ppm
FE		100 ppm
MG		250 ppm
AG		
BA		
BE		
CD		
CO		
CR		
CU		
MN		
NI		
PB		
V		
ZN		

Initial: CSK  
 Date: 6-1-08

## METALS STANDARD DOCUMENTATION

<b>Standard:</b>	INTERFERENCE CHECK STANDAF	<b>ME #:</b> 0806002
<b>Date Received/Prepped:</b>	6/1/2008	<b>By:</b> CSK
<b>Date Expired:</b>	12/1/2008	<b>Lot #:</b> various
<b>Manufacturer:</b>	MWH-CSK	<b>Certificate:</b>
<b>Matrix:</b>	5% HNO3	<b>NIST SRM:</b>
<b>Amount:</b>	500 mL	<b>Storage:</b> Room Temp.

Component	Comment	Conc. Unit:
Al	P/N 4400-INTA1-500(25ML)	250 ppm
Ca	P/N 4400-INTB1-100(2.5ML)	250 ppm
Fe		100 ppm
Mg		250 ppm
AG		0.5 ppm
BA		0.25 ppm
BE		0.25 ppm
CD		0.5 ppm
Co		0.25 ppm
Cr3		0.25 ppm
Cu		0.5 ppm
Mn		0.25 ppm
Ni		0.25 ppm
Pb		0.25 ppm
V		0.25 ppm
Zn		0.5 ppm

Tl  
 V  
 Zn  
 Si

~~100 ppm  
 100 ppm  
 100 ppm  
 50 ppm~~ 
  
*CSK*  
*6/1/08*



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ME 070500

## CERTIFICATE OF ANALYSIS

**P/N 4400-INTB1-100**  
 CLP Analytes B Solution  
 in 5% HNO<sub>3</sub>

Lot # 07c256

Material Source: Metals and Salts  
 Source Purity: 99.99+%

Elements and Concentrations: µg/mL

Ag	100	Ba	50	Be	50	Cd	100
Co	50	Cr	50	Cu	50	Mn	50
Ni	100	Pb	100	V	50	Zn	100

This standard solution was prepared using high-purity reference materials, sub-boiled distilled nitric acid and 18-megaohm deionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

Starting materials were analyzed by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against an independent source traceable to the National Institute of Standards and Technology's SRM 3100 series.

Accuracy and stability are guaranteed to within plus or minus 0.5% of the certified value for 18 months after the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the USA or +31 20 638 05 97 in Europe.



Initial: STE  
Date: 8/27/07

## METALS STANDARD DOCUMENTATION

**Standard:** CLP Interferents A Solution  
**Date Received/Prepped:** 8/27/2007  
**Date Expired:** 2/15/2009  
**Manufacturer:** CPI International  
**Matrix:** 5% HNO<sub>3</sub>  
**Amount:** 500 mL

**ME #:** 0708009  
**By:** STE  
**Lot #:** 07E175  
**Certificate:**  
**NIST SRM:**  
**Storage:** Room Temp.

<u>Component</u>	<u>Comment</u>	<u>Conc. Unit:</u>
Al	P/N 4400-INTA1-500	5000 ug/mL
Ca		5000 ug/mL
Fe		2000 ug/mL
Mg		5000 ug/mL

FEB 15 09



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## CERTIFICATE OF ANALYSIS

**P/N 4400-INTA1-500**

CLP Interferents A Solution  
in 5% HNO<sub>3</sub>

ME 0705009

Lot # 07E175

Material Source: Metals and Salts  
Source Purity: 99.99+%

Elements and Concentrations: µg/mL

Al 5000 Ca 5000 Fe 2000 Mg 5000

This standard solution was prepared using high-purity reference materials, sub-boiled distilled nitric acid and 18-megaohm deionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

Starting materials were analyzed by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against an independent source traceable to the National Institute of Standards and Technology's SRM 3100 series.

Accuracy and stability are guaranteed to within plus or minus 0.5% of the certified value for 18 months after the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the USA or +31 20 638 05 97 in Europe.

Initial:

Date:

Wbh  
4/11/08

## METALS STANDARD DOCUMENTATION

Standard: ICP 1 PPM CHECK  
 Date Received/Prepped 1/11/2008  
 Date Expired: 7/11/2008  
 Manufacturer: MWH-wbh  
 Matrix: 5% HNO3  
 Amount: 500 mL

ME #: 0801010  
 By: Wbh  
 Lot #: VARIOUS  
 Certificate:  
 NIST SRM:  
 Storage: Room Tem

Component	Comment	Conc. Unit:
Ag	5mL ME0708011 /500mL	1 mg/L
Al		1 mg/L
B		1 mg/L
Ba		1 mg/L
K		10 mg/L
Na		1 mg/L
Si		1 mg/L
As	5mL ME0708012 /500mL	1 mg/L
Be		1 mg/L
Ca		1 mg/L
Cd		1 mg/L
Co		1 mg/L
Cr		1 mg/L
Cu		1 mg/L
Fe		1 mg/L
Li		1 mg/L
Mg		1 mg/L
Mn		1 mg/L
Mo		1 mg/L
Ni		1 mg/L
Pb		1 mg/L
Sb		1 mg/L
Se		1 mg/L
Sr		1 mg/L
Ti		1 mg/L
Tl		1 mg/L
V		1 mg/L
Zn		1 mg/L

Initial:

STE

Date:

8/27/07

## METALS STANDARD DOCUMENTATION

**Standard:** QC Check Standard 21  
**Date Received/Prepped:** 8/27/2007  
**Date Expired:** 8/31/2008  
**Manufacturer:** Crescent Chemical Co. Inc.  
**Matrix:** 5% HNO<sub>3</sub>/tr. F/tr Tartaric Acid  
**Amount:** 100 mL

**ME #:** 0708012  
**By:** STE  
**Lot #:** 074438H  
**Certificate:**  
**NIST SRM:**  
 Room temp. storage

Component	Comment	Conc. Unit:
As	Catalog No: QC-021.1	100 ug/mL
Be		100 ug/mL
Ca		100 ug/mL
Cd		100 ug/mL
Co		100 ug/mL
Cu		100 ug/mL
Fe		100 ug/mL
Li		100 ug/mL
Mg		100 ug/mL
Mn		100 ug/mL
Mo		100 ug/mL
Ni		100 ug/mL
Pb		100 ug/mL
Sb		100 ug/mL
Se		100 ug/mL
Sr		100 ug/mL
Ti		100 ug/mL
Tl		100 ug/mL
V		100 ug/mL
Zn		100 ug/mL

ME 0708012

Laboratory Report - Certificate of Analysis

**Environmental Multielement Standard**

**QC Check Standard 21**

**CATALOG NO: QC-021.1**

**CONTENTS: See Below**

**MATRIX: 5% HNO<sub>3</sub>/tr. F/tr. Tartaric Acid**

**LOT NO.: 074438H**

This solution is intended for use as a calibration standard for plasma emission spectroscopy (ICP or DCP). It is a multielement solution, that was prepared gravimetrically to contain the elements/concentrations shown below.

In order to verify the concentration, the final solution was checked against NIST SRMS: 3102a, 3103a, 3105a, 3108, 3109a, 3112a, 3113, 3114, 3126a, 3128, 3129a, 3131a, 3132, 3134, 3136, 3149, 3153a, 3158, 3162a, 3165, and 3168a.

Concentrations are given in µg/mL unless noted otherwise.

As 100	Be 100	Ca 100	Cd 100	Co 100
Cr 100	Cu 100	Fe 100	Li 100	Mg 100
Mn 100	Mo 100	Ni 100	Pb 100	Sb 100
Se 100	Sr 100	Ti 100	Tl 100	V 100
Zn 100				

**Crescent Chemical Co. Inc.**

Julie M. MacIntosh  
QA Manager

**EXPIRES: August 2008**

CRESCENT CHEMICAL CO, INC., waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

*Crescent Chemical Co, Inc., 2 Oval Drive, Islandia, NY 11749  
(516) 348-0333 - Fax (516) 348-0913*

ME0705011

Initial:

STE

Date:

8/27/07

### METALS STANDARD DOCUMENTATION

**Standard:** QC Check Standard 7  
**Date Received/Prepped:** 8/27/2007  
**Date Expired:** 8/31/2007  
**Manufacturer:** Crescent Chemical Co. Inc.  
**Matrix:** 5% HNO3  
**Amount:**

**ME #:** 0705011  
**By:** STE  
**Lot #:** 074438I  
**Certificate:**  
**NIST SRM:**  
**Storage:** Room Temp.

Component	Comment	Conc. Unit:
Ag	Catalog No: QC-007.1	100 ug/mL
Al		100 ug/mL
B		100 ug/mL
Ba		100 ug/mL
K		1000 +/- 5 ug/mL
Na		100 ug/mL
Si		50 ug/mL

ME 07 08 011

Laboratory Report - Certificate of Analysis

Environmental Multielement Standard

QC Check Standard 7

CATALOG NO: QC-007.1

CONTENTS: See Below

MATRIX: 5% HNO<sub>3</sub>/tr. F

LOT NO.: 074438I

This solution is intended for use as a calibration standard for plasma emission spectroscopy (ICP or DCP). It is a multielement solution, that was prepared gravimetrically to contain the elements/concentrations shown below.

In order to verify the concentration, the final solution was checked against NIST SRMS: 3101a, 3104a, 3107, 3141a, 3150, 3151, and 3152a.

Concentrations are given in µg/mL unless noted otherwise.

Ag 100	Al 100	B 100	Ba 100	K 1,000±5
Na 100	Si 50.0			

Crescent Chemical Co. Inc.

Julie M. MacIntosh  
QA Manager

EXPIRES: August 2008

CRESCENT CHEMICAL CO, INC., waives all responsibility for any damages resulting from the usage and/or implementation of the products/data described herein.

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Initial: STE  
Date: 11/6/07

### METALS STANDARD DOCUMENTATION

Standard: ICP LINEARITY CHECK  
Date Received/Prepped: 11/6/2007  
Date Expired: <sup>STE</sup> ~~5/6/2008~~ <sup>11/6/07</sup> 2/6/2008  
Manufacturer: MWH-STE  
Matrix: 5% HNO3  
Amount: 500 mL  
ME #: 0711002  
By: STE  
Lot #: VARIOUS  
Certificate:  
NIST SRM:  
Storage: Room Temp.

Component	Comment	Conc. Unit:
Ca	15.0 mL ME0702002/500 mL	300 ppm
K	15.0 mL ME0702005/ 500 mL	300 ppm
Mg	10.0 mL ME0702004/ 500 mL	200 ppm
Na	15 mL ME0702003/ 500 mL	300 ppm
Fe	5.0 mL ME0701008/ 500 mL	100 ppm



Initial:

Date:

W 37  
2/20/07

### METALS STANDARD DOCUMENTATION

**Standard:** Potassium 10000ppm Stock Std  
**Date Received/Prepped:** 2/20/2007  
**Date Expired:** 8/16/2008  
**Manufacturer:** CPI  
**Matrix:** 1% HNO3  
**Amount:** 250 mL

**ME #:** 0702005  
**By:** WBH  
**Lot #:** 07B056  
**Certificate:** Y  
**NIST SRM:** 3141  
Room temp. storage

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
K	P/N 4400-10M411	10000 ppm



Initial:

Date:

WBH  
2/20/07

## METALS STANDARD DOCUMENTATION

**Standard:** Magnesium 10000ppm Stock Std      **ME #:** 0702004  
**Date Received/Prepped:** 2/20/2007      **By:** WBH  
**Date Expired:** 8/16/2008      **Lot #:** 07B058  
**Manufacturer:** CPI      **Certificate:** Y  
**Matrix:** 4% HNO3      **NIST SRM:** 3131  
**Amount:** 250 mL      Room temp. storage

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
Mg	P/N 4400-10M311	10000 ppm



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## CERTIFICATE OF ANALYSIS

**P/N 4400-10M311**

**P/N S4400-10M311**

Single-Element Magnesium Standard

Mg in 4% HNO<sub>3</sub>

10,000 ± 30 µg/mL

Lot # 07B058

M70702004

Material Source: Magnesium Metal

Source Purity: 99.99%

Specific Gravity: 1.056 @ 21 °C

This standard solution was prepared using high-purity metal, sub-boiled distilled nitric acid and 18-megaohm deionized water. The starting material was weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

The standard solution concentration was certified by ICP against the National Institute of Standards and Technology's SRM 3131. Trace impurities of the standard solution at 1000 µg/mL were analyzed by ICP-MS.

<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>	<u>ppb</u>	<u>DL</u>
Al 28	0.1	Cu 1.6	0.1	Pb 7.7	0.7	K ND	70	Tl 0.91	0.1
Sb ND	0.1	Dy ND	0.1	Li ND	0.4	Pr 0.28	0.1	Th ND	0.1
As ND	6	Er ND	0.1	Lu ND	1	Re ND	0.1	Tm ND	0.1
Ba 0.28	0.1	Eu ND	0.1	Mg X	0.2	Rh ND	0.1	Sn 0.14	0.1
Be ND	0.1	Gd 0.23	0.1	Mn 19.8	1	Rb ND	0.1	Ti ND	0.1
Bi ND	0.1	Ga 0.18	0.1	Hg ND	0.2	Ru ND	0.1	W ND	0.1
B ND	4	Ge ND	0.1	Mo ND	0.1	Sm ND	0.1	U ND	0.1
Br ND	10	Au ND	0.1	Nd 1.1	0.1	Se ND	6	V ND	1
Cd ND	0.1	Hf ND	0.1	Ni 1	0.1	Si 64	20	Yb ND	0.1
Ca ND	7	Ho ND	0.1	Nb ND	0.1	Ag 0.19	0.1	Y 0.2	0.1
Ce 2.1	0.1	I 1	0.2	Os ND	0.1	Na 7.2	1	Zn ND	1
Cs ND	0.1	Ir ND	0.1	Pd ND	0.1	Sr 0.19	0.1	Zr 0.29	0.1
Cr ND	1	Fe 80	30	P ND	10	Ta ND	0.1		
Co ND	0.1	La 0.76	0.1	Pt ND	0.1	Te ND	0.1		

X=Major Element INT=Interference from Major Element ND=Not Detected DL=Detection Limit

Accuracy and stability are guaranteed to within plus or minus 0.3% of the certified value for 18 months after the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the USA or +31 20 638 05 97 in Europe.

Initial:  
Date:

U31  
2/20/07

## METALS STANDARD DOCUMENTATION

**Standard:** Sodium 10000ppm Stock Std      **ME #:** 0702003  
**Date Received/Prepped:** 2/20/2007      **By:** WBH  
**Date Expired:** 8/16/2008      **Lot #:** 07B057  
**Manufacturer:** CPI      **Certificate:** Y  
**Matrix:** 1% HNO<sub>3</sub>      **NIST SRM:** 3152a  
**Amount:** 250 mL      Room temp. storage

<b>Component</b>	<b>Comment</b>	<b>Conc. Unit:</b>
Na	P/N 4400-10M521	10000 ppm



Initial:

W37

Date:

2/20/07

## METALS STANDARD DOCUMENTATION

**Standard:** Calcium 10000ppm Stock Std **ME #:** 0702002  
**Date Received/Prepped:** 2/20/2007 **By:** WBH  
**Date Expired:** 8/16/2008 **Lot #:** 07B065  
**Manufacturer:** CPI **Certificate:** Y  
**Matrix:** 4% HNO3 **NIST SRM:** 3109a  
**Amount:** 250 mL Room temp. storage

<u>Component</u>	<u>Comment</u>	<u>Conc. Unit:</u>
Ca	P/N 4400-10M91	10000 ppm



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## CERTIFICATE OF ANALYSIS

**P/N 4400-10M91**  
**P/N S4400-10M91**

1780702602

Single-Element Calcium Standard

Ca in 4% HNO<sub>3</sub>  
 10,000 ± 30 µg/mL

Lot # 07B065

Material Source: Calcium Carbonate (CaCO<sub>3</sub>)  
 Source Purity: 99.997%  
 Specific Gravity: 1.035 @ 21 °C

This standard solution was prepared using high-purity salt, sub-boiled distilled nitric acid and 18-megaohm deionized water. The starting material was weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

The standard solution concentration was certified by ICP against the National Institute of Standards and Technology's SRM 3109a. Trace impurities of the standard solution at 1000 µg/mL were analyzed by ICP-MS.

	<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>
Al	7	0.1	Cu	1.7	0.1	Pb	0.23	0.1	K	ND	70
Sb	ND	0.1	Dy	ND	0.1	Li	ND	0.4	Pr	ND	0.1
As	ND	6	Er	ND	0.1	Lu	ND	1	Re	ND	0.1
Ba	1.5	0.1	Eu	ND	0.1	Mg	38	0.2	Rh	ND	0.1
Be	ND	0.1	Gd	ND	0.1	Mn	ND	1	Rb	ND	0.1
Bi	ND	0.1	Ga	ND	0.1	Hg	ND	0.2	Ru	ND	0.1
B	1.5	4	Ge	ND	0.1	Mo	ND	0.1	Sm	ND	0.1
Br	ND	10	Au	ND	0.1	Nd	ND	0.1	Se	ND	6
Cd	ND	0.1	Hf	ND	0.1	Ni	3	0.1	Si	47	8
Ca	X	7	Ho	ND	0.1	Nb	ND	0.1	Ag	ND	0.1
Ce	ND	0.1	I	0.27	0.2	Os	ND	0.1	Na	11.6	1
Cs	ND	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	55	0.1
Cr	ND	1	Fe	INT	30	P	ND	10	Ta	ND	0.1
Co	INT	0.1	La	0.41	0.1	Pt	ND	0.1	Te	ND	0.1

INT=Interference from Major Element ND=None Detected X=Major Element DL=Detection Limit

Accuracy and stability are guaranteed to within plus or minus 0.3% of the certified value for 18 months after the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654 in the USA or +31 20 638 05 97 in Europe.



Initial:

W34

Date:

1/26/07

## METALS STANDARD DOCUMENTATION

Standard: FE 10000ppm Stock Std  
Date Received/Prepped: 1/26/2007  
Date Expired: 7/19/2008  
Manufacturer: CPI  
Matrix: 4% HNO3  
Amount: 100 mL

ME #: 701008  
By: WBH  
Lot #: 061143  
Certificate:  
NIST SRM: 3126a  
Storage: Room Temp

Component	Comment	Conc. Unit:
Fe	PN4400-10M261	10000 PPM

