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Level IV Data Package

MWH Group 209942

Method: EPA 200.7

2707110558
2707110559

EPA 200.7/6010B QC Check List

Analyst WBy Analysis Date 7/12/07 Reviewer/Date JM 17 Jul 07

Instrumnet PerKin Elmer Optima 4300DV

✓ All sample analyzed within 6 month holding time

✓ All sample raw concentraction below the high standard or linear anged samples marked for dilution and rerun

Initial and closing QC
- ✓ ICV within +/- 5%
- ✓ Linearity check +/- 10%
- ✓ ICSAB +/- 20%
- ✓ 1 PPM check +/-/10%
- ✓ 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 +/-20%
- ✓ 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

N/A QIR needed for failed QC

✓ Special Det Code noted on the cover sheet

✓ R value for multi point calibration is > 0.995

✓ Proper MRL check ran for special low MRL samples

Reagent and Standards used for
Optima 4300 DV
Updated 07/10/07

Int: WBy
Date: 7/12/07

Method 200.7/6010

ICP SUMMARY SHEET

File ID: 070712
Date Started: 7/12/07
Analyst ID: wbh

SAMPLE ID

LINEARITY	(20:33)	Wash	(20:44)	FILTERCHECK	(21:06)
2707110393	(21:24)	2707110398	(21:36)	2707110395	(21:40)
2707110669	(21:58)	2707110665	(22:03)	2707110667	(22:07)
2707110390	(22:11)	2707110396	(22:16)	LINEARITY	(22:43)
Wash	(22:54)	FILTERCHECK	(23:16)	2707110393	(23:34)
2707110398	(23:46)	2707110395	(23:50)	2707110669	(0:02)
2707110665	(0:06)	2707110667	(0:10)	2707110390	(0:15)
2707110396	(0:19)	2707110663	(0:24)	2707110664	(0:28)
2707110569	(0:32)	2707110571	(0:55)	2707110575	(1:00)
2707110573	(1:04)	2707110572	(1:09)	2707110597	(1:13)
2707110592	(1:18)	2707110419	(1:22)	2707110568	(1:26)
2707110576	(1:31)	2707110668	(1:52)	2707110670	(2:04)
2707110596	(2:08)	2707110574	(2:12)	2707100338	(2:16)
2707100341	(2:20)	2704100342	(2:37)	2704110666	(2:41)
2707100308	(2:45)	2707100273	(2:50)	2707100277	(2:54)
2707100305	(3:06)	2707100265	(3:11)	2707110139	(3:15)
2707110141	(3:26)	2707110143	(3:30)	2707110157	(3:35)
2707110159	(3:39)	2707110160	(3:43)	2707100380	(3:47)
2707090217	(4:03)	2707110288	(4:28)	2707120227	(4:33)
2707110559_2	(4:38)	Wash	(4:50)		

COMMENT:

Analyst: WBH

Approved By: 17 Jul 07

BATCH NUMBER for 070712

Test Parameter:

SCA YR AG AL AS B_ BA BE CA CD CO CR CU FE K MG MN MO NA NI

Batch ID: 2707110393

2707110393	2707110398	2707110395
2707110669	2707110665	2707110667
2707110390	2707110396	

Batch ID: 2707110393

2707110393	2707110398	2707110395
2707110669	2707110665	2707110667
2707110390	2707110396	2707110663
2707110664	2707110569	2707110571
2707110575	2707110573	2707110572
2707110597	2707110592	2707110419
2707110568	2707110576	

Batch ID: 2707110668

2707110668	2707110670	2707110596
2707110574	2707100338	2707100341
2704100342	2704110666	2707100308
2707100273	2707100277	2707100305
2707100265	2707110139	2707110141
2707110143	2707110157	2707110159
2707110160	2707100380	

Batch ID: 2707090217

2707090217	2707110288	2707120227
2707110559_2X		

File ID: 070712 CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
ICV	7/12/07	20:30	1	9.9357	9.94	95-105	99.3%
LINEARITY	7/12/07	20:33	1	0.0016	.0016		
ICSA	7/12/07	20:37	1	-0.0006	ND	80-120	
ICSAB	7/12/07	20:41	1	.24080	.241	80-120	96.3%
Wash	7/12/07	20:44	1	0.0003	0.0003		
QC-25 1ppm	7/12/07	20:48	1	1.0041	1.0		
CCV	7/12/07	20:55	1	0.0431	.0431	90-110	.862% Q
ICB	7/12/07	20:59	1	0.0005	0.0005		
MRL	7/12/07	21:03	1	0.0105	.0105	50-150	105%
FILTERCHECK	7/12/07	21:06	1	.00912	.0091		
MRL/2	7/12/07	21:11	1	0.0055	.0055		
MBLANK	7/12/07	21:14	1	0.0004	0.0004		
LCS	7/12/07	21:18	1	.97016	.97	85-115	97.0%
LCSD	7/12/07	21:21	1	.96948	.969	85-115	96.9%
2707110393	7/12/07	21:24	1	0.0054	.0054		
2707110393MS	7/12/07	21:28	1	.97797	.978	[0.973]	97.2%
2707110393MSD	7/12/07	21:32	1	.97058	.971	[0.965]	96.5%
2707110393T	7/12/07	21:32	1		1.00	70 - 130	
2707110398	7/12/07	21:36	1	0.0015	.0015		
2707110395	7/12/07	21:40	1	0.0047	.0047		
CCV	7/12/07	21:51	1	0.0084	.0084	90-110	.167% Q
CCB	7/12/07	21:55	1	0.0002	0.0001		
2707110669	7/12/07	21:58	1	0.0151	.015		
2707110665	7/12/07	22:03	1	0.0003	0.0003		
2707110667	7/12/07	22:07	1	0.0016	.0016		
2707110390	7/12/07	22:11	1	0.0005	0.0004		
2707110396	7/12/07	22:16	1	0.0050	.005		
ICV	7/12/07	22:40	1	9.7915	9.79 ✓	95-105	97.9%
LINEARITY	7/12/07	22:43	1	0.0024	.0024		
ICSA	7/12/07	22:47	1	-0.0009	ND	80-120	
ICSAB	7/12/07	22:51	1	.24769	.248	80-120	99.0%
Wash	7/12/07	22:54	1	0.0002	0.0001		
QC-25 1ppm	7/12/07	23:01	1	.98398	.980		
CCV	7/12/07	23:05	1	4.8862	4.89	90-110	97.7%
ICB	7/12/07	23:09	1	0.0002	0.0001		
MRL	7/12/07	23:12	1	0.0101	.0101 ✓	50-150	100%
FILTERCHECK	7/12/07	23:16	1	-0.0007	ND		
MRL/2	7/12/07	23:20	1	0.0053	.0053 ✓		
MBLANK	7/12/07	23:23	1	0.0001	0.0000 ✓		
LCS	7/12/07	23:27	1	.95608	.956	85-115	95.6%
LCSD	7/12/07	23:30	1	.96430	.964	85-115	96.4%
2707110393	7/12/07	23:34	1	0.0055	.0055		
2707110393MS	7/12/07	23:38	1	.96907	.969	[0.964]	96.3%
2707110393MSD	7/12/07	23:42	1	.98739	.987	[0.982]	98.2%
2707110393T	7/12/07	23:42	1		1.00	70 - 130	
2707110398	7/12/07	23:46	1	0.0013	.0013		

File ID: 070712 CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
2707110395	7/12/07	23:50	1	0.0047	.0047		
CCV	7/12/07	23:54	1	4.8942	4.89	90-110	97.8%
CCB	7/12/07	23:58	1	0.0002	0.0002		
2707110669	7/13/07	0:02	1	0.0151	.015		
2707110665	7/13/07	0:06	1	-0.0002	ND		
2707110667	7/13/07	0:10	1	0.0013	.0013		
2707110390	7/13/07	0:15	1	0.0002	0.0002		
2707110396	7/13/07	0:19	1	0.0042	.0042		
2707110663	7/13/07	0:24	1	-0.0009	ND		
2707110664	7/13/07	0:28	1	-0.0005	ND		
2707110569	7/13/07	0:32	1	0.0031	.0031		
2707110569MS	7/13/07	0:37	1	.96263	.963	[0.960]	95.9%
2707110569MSD	7/13/07	0:40	1	.96039	.96	[0.957]	95.7%
2707110569T	7/13/07	0:40	1		1.00	70 - 130	
CCV	7/13/07	0:44	1	4.8805	4.88	90-110	97.6%
CCB	7/13/07	0:48	1	0.0002	0.0001		
MCV	7/13/07	0:51	1	2.4130	2.41	90-110	96.5%
2707110571	7/13/07	0:55	1	0.0001	0.0000		
2707110575	7/13/07	1:00	1	0.0001	0.0000		
2707110573	7/13/07	1:04	1	0.0000	0.0000		
2707110572	7/13/07	1:09	1	0.0026	.0026		
2707110597	7/13/07	1:13	1	-0.0002	ND		
2707110592	7/13/07	1:18	1	-0.0006	ND		
2707110419	7/13/07	1:22	1	0.0010	.001		
2707110568	7/13/07	1:26	1	0.0044	.0044		
2707110576	7/13/07	1:31	1	0.0018	.0018		
MBLANK	7/13/07	1:35	1	0.0001	0.0001		
CCV	7/13/07	1:39	1	4.8940	4.89	90-110	97.8%
CCB	7/13/07	1:42	1	0.0000	0.0000		
LCS	7/13/07	1:46	1	.95779	.958	85-115	95.7%
LCSD	7/13/07	1:49	1	.94766	.948	85-115	94.7%
2707110668	7/13/07	1:52	1	0.0104	.010		
2707110668MS	7/13/07	1:56	1	.96179	.962	[0.951]	95.1%
2707110668MSD	7/13/07	2:00	1	.96727	.967	[0.957]	95.6%
2707110668T	7/13/07	2:00	1		1.00	70 - 130	
2707110670	7/13/07	2:04	1	0.0066	.0066		
2707110596	7/13/07	2:08	1	-0.0001	ND		
2707110574	7/13/07	2:12	1	0.0023	.0023		
2707100338	7/13/07	2:16	1	0.0057	.0057		
2707100341	7/13/07	2:20	1	0.0079	.0079		
CCV	7/13/07	2:25	1	4.8586	4.86	90-110	97.1%
CCB	7/13/07	2:29	1	0.0001	0.0000		
MCV	7/13/07	2:32	1	2.4311	2.43	90-110	97.2%
2704100342	7/13/07	2:37	1	0.0030	.003		
2704110666	7/13/07	2:41	1	0.0009	0.0008		
2707100308	7/13/07	2:45	1	-0.0000	ND		
2707100273	7/13/07	2:50	1	-0.0006	ND		
2707100277	7/13/07	2:54	1	0.0000	0.0000		

File ID: 070712 CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
2707100277MS	7/13/07	2:59	1	.95480	.955	[0.955]	95.4%
2707100277MSD	7/13/07	3:03	1	.95580	.956	[0.956]	95.5%
2707100277T	7/13/07	3:03	1		1.00	70 - 130	
2707100305	7/13/07	3:06	1	-0.0005	ND		
2707100265	7/13/07	3:11	1	-0.0006	ND		
2707110139	7/13/07	3:15	1	-0.0008	ND		
CCV	7/13/07	3:19	1	4.8995	4.9	90-110	97.9%
CCB	7/13/07	3:23	1	-0.0001	ND ✓		
2707110141	7/13/07	3:26	1	-0.0008	ND		
2707110143	7/13/07	3:30	1	-0.0006	ND		
2707110157	7/13/07	3:35	1	0.0022	.0022		
2707110159	7/13/07	3:39	1	-0.0008	ND		
2707110160	7/13/07	3:43	1	-0.0007	ND		
2707100380	7/13/07	3:47	1	0.0019	.0019		
MBLANK	7/13/07	3:51	1	0.0001	0.0001 ✓		
LCS	7/13/07	3:55	1	.97785	.978 ✓	85-115	97.7%
LCSD	7/13/07	4:00	1	.97048	.97 ✓	85-115	97.0%
2707090217	7/13/07	4:03	1	-0.0005	ND		
CCV	7/13/07	4:08	1	4.8544	4.85	90-110	97.0%
CCB	7/13/07	4:12	1	0.0000	0.0000 ✓		
MCV	7/13/07	4:15	1	2.4426	2.44	90-110	97.7%
2707090217MS	7/13/07	4:20	1	.98551	.986	[0.986]	98.5%
2707090217MSD	7/13/07	4:24	1	.98284	.983	[0.983]	98.2%
2707090217T	7/13/07	4:24	1		1.00	70 - 130	
2707110288	7/13/07	4:28	1	0.0000	0.0000		
2707120227	7/13/07	4:33	1	-0.0009	ND		
2707110559_2X	7/13/07	4:38	2	0.0530	.053 ✓		
ICSA	7/13/07	4:42	1	-0.0007	ND	80-120	
ICSAB	7/13/07	4:46	1	.24139	.241	80-120	96.5%
Wash	7/13/07	4:50	1	-0.0001	ND		
QC-25 1ppm	7/13/07	4:56	1	.96983	.970		
ECV	7/13/07	5:00	1	4.8661	4.87	90-110	97.3%
ECB	7/13/07	5:04	1	-0.0000	ND ✓		
MRL	7/13/07	5:07	1	0.0099	.0099	50-150	99.2%

Analysis Begun

Start Time: 7/12/2007 22:33:23 Plasma On Time: 7/12/2007 06:00:12
Logged In Analyst: Owner Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N2121801Autosampler Model: AS-93plus

Sample Information File: C:\pe\Owner\Sample Information\070712.sif
Batch ID: 070712
Results Data Set: 070712
Results Library: C:\pe\Owner\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 0
Sample ID: Calib Blank 1 Date Collected: 7/12/2007 22:33:23
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sca	417154.8	17236.93	4.13%	100	%
Yr	172104.3	6596.46	3.83%	100	%
Agt	334.5	18.46	5.52%	[0.00]	mg/L
Alt	4.3	4.12	96.25%	[0.00]	mg/L
Ast	1.7	0.05	2.75%	[0.00]	mg/L
B_t	223.9	3.05	1.36%	[0.00]	mg/L
Bat	-62.2	0.73	1.17%	[0.00]	mg/L
Bet	-5446.3	134.13	2.46%	[0.00]	mg/L
Cat	447.6	27.58	6.16%	[0.00]	mg/L
Cdt	37.0	2.67	7.21%	[0.00]	mg/L
Cot	-77.1	1.64	2.12%	[0.00]	mg/L
Crt	306.5	0.90	0.29%	[0.00]	mg/L
Cut	2219.4	138.60	6.24%	[0.00]	mg/L
Fet	-24.8	0.15	0.59%	[0.00]	mg/L
Kt	-84.7	69.34	81.88%	[0.00]	mg/L
Mgt	9.6	1.02	10.65%	[0.00]	mg/L
Mnt	61.0	11.63	19.07%	[0.00]	mg/L
Mot	13.9	1.32	9.51%	[0.00]	mg/L
Nat	-387.0	29.82	7.71%	[0.00]	mg/L
Nit	-70.7	2.23	3.15%	[0.00]	mg/L
Pbt	-28.4	1.12	3.94%	[0.00]	mg/L
Sbt	6.5	5.01	76.96%	[0.00]	mg/L
Set	-10.7	1.50	14.04%	[0.00]	mg/L
Tlt	-27.7	4.55	16.45%	[0.00]	mg/L
Vt	206.5	2.30	1.11%	[0.00]	mg/L
Znt	39.4	6.95	17.63%	[0.00]	mg/L
Alxt	512.0	14.00	2.73%	[0.00]	ug/L
Bext	-5446.3	134.13	2.46%	[0.00]	ug/L

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

Autosampler Location: 15
Date Collected: 7/12/2007 22:36:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Standard 2

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: Standard 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sca	396625.9	2716.37	0.68%	95.1	%
Yr	166756.3	1728.72	1.04%	96.9	%
Agt	509409.7	2453.95	0.48%	[2]	mg/L
Alt	31394.3	292.76	0.93%	[10]	mg/L
Ast	18638.7	48.11	0.26%	[10]	mg/L
B_t	152438.9	803.62	0.53%	[5.02]	mg/L
Bat	666950.0	3862.14	0.58%	[10]	mg/L
Bet	11431900.4	106265.42	0.93%	[4.01]	mg/L
Cat	591377.4	1328.69	0.22%	[100]	mg/L
Cdt	122540.0	785.36	0.64%	[5.01]	mg/L
Cot	240547.0	1437.73	0.60%	[10]	mg/L
Crt	742597.9	3374.27	0.45%	[9.97]	mg/L
Cut	3363526.0	19870.89	0.59%	[10]	mg/L
Fet	9620.4	122.98	1.28%	[9.98]	mg/L
Kt	111307.7	480.72	0.43%	[100]	mg/L
Mgt	324337.5	628.60	0.19%	[100]	mg/L
Mnt	5401121.1	31255.28	0.58%	[10]	mg/L
Mot	108833.2	442.22	0.41%	[9.98]	mg/L
Nat	219318.5	937.81	0.43%	[100]	mg/L
Nit	211041.7	965.95	0.46%	[10]	mg/L
Pbt	45244.7	107.39	0.24%	[10]	mg/L
Sbt	18072.9	40.81	0.23%	[10]	mg/L
Set	12038.1	69.80	0.58%	[10]	mg/L
Tlt	25855.7	49.28	0.19%	[10]	mg/L
Vt	1559525.5	7391.38	0.47%	[10]	mg/L
Znt	445648.0	2611.52	0.59%	[10]	mg/L
Alxt	794756.0	6163.20	0.78%	[10000]	ug/L
Bext	11431900.4	106265.42	0.93%	[4010]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag	1	Lin, Calc Int	0.0	254700	0.00000	1.000000	
Al	1	Lin, Calc Int	0.0	3139	0.00000	1.000000	
As	1	Lin, Calc Int	0.0	1864	0.00000	1.000000	
B_	1	Lin, Calc Int	0.0	30370	0.00000	1.000000	
Ba	1	Lin, Calc Int	0.0	66690	0.00000	1.000000	
Be	1	Lin, Calc Int	0.0	2851000	0.00000	1.000000	
Ca	1	Lin, Calc Int	0.0	5914	0.00000	1.000000	
Cd	1	Lin, Calc Int	0.0	24460	0.00000	1.000000	
Co	1	Lin, Calc Int	-0.0	24050	0.00000	1.000000	
Cr	1	Lin, Calc Int	0.0	74480	0.00000	1.000000	
Cu	1	Lin, Calc Int	0.0	336400	0.00000	1.000000	
Fe	1	Lin, Calc Int	0.0	964.0	0.00000	1.000000	
K	1	Lin, Calc Int	0.0	1113	0.00000	1.000000	
Mg	1	Lin, Calc Int	0.0	3243	0.00000	1.000000	
Mn	1	Lin, Calc Int	0.0	540100	0.00000	1.000000	
Mo	1	Lin, Calc Int	0.0	10910	0.00000	1.000000	
Na	1	Lin, Calc Int	0.0	2193	0.00000	1.000000	
Ni	1	Lin, Calc Int	0.0	21100	0.00000	1.000000	
Pb	1	Lin, Calc Int	0.0	4524	0.00000	1.000000	
Sb	1	Lin, Calc Int	0.0	1807	0.00000	1.000000	
Se	1	Lin, Calc Int	0.0	1204	0.00000	1.000000	

Tl	1	Lin, Calc Int	0.0	2586	0.00000	1.000000
V	1	Lin, Calc Int	0.0	156000	0.00000	1.000000
Zn	1	Lin, Calc Int	0.0	44560	0.00000	1.000000
Alx	1	Lin, Calc Int	0.0	79.48	0.00000	1.000000
Bex	1	Lin, Calc Int	0.0	2851	0.00000	1.000000

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

Autosampler Location: 15
Date Collected: 7/12/2007 22:40:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	392124.2	94.0	%	0.11				0.11%
Yr	164021.2	95.3	%	2.19				2.30%
Ag†	503269.8	1.98	mg/L	0.009	1.98	mg/L	0.009	0.45%
QC value within limits for Ag		Recovery = 98.79%						
Al†	30187.8	9.62	mg/L	0.590	9.62	mg/L	0.590	6.14%
QC value within limits for Al		Recovery = 96.16%						
As†	18005.3	9.66	mg/L	0.160	9.66	mg/L	0.160	1.66%
QC value within limits for As		Recovery = 96.59%						
B_†	150375.1	4.93	mg/L	0.015	4.93	mg/L	0.015	0.31%
QC value within limits for B_		Recovery = 98.64%						
Ba†	655591.0	9.83	mg/L	0.028	9.83	mg/L	0.028	0.29%
QC value within limits for Ba		Recovery = 98.30%						
Be†	11390361.8	4.00	mg/L	0.123	4.00	mg/L	0.123	3.08%
QC value within limits for Be		Recovery = 99.89%						
Ca†	587163.4	99.3	mg/L	0.37	99.3	mg/L	0.37	0.37%
QC value within limits for Ca		Recovery = 99.29%						
Cd†	120719.3	4.81	mg/L	0.010	4.81	mg/L	0.010	0.22%
QC value within limits for Cd		Recovery = 96.11%						
Co†	236308.5	9.82	mg/L	0.015	9.82	mg/L	0.015	0.15%
QC value within limits for Co		Recovery = 98.24%						
Cr†	729309.0	9.79	mg/L	0.025	9.79	mg/L	0.025	0.26%
QC value within limits for Cr		Recovery = 97.92%						
Cu†	3338100.9	9.93	mg/L	0.070	9.93	mg/L	0.070	0.70%
QC value within limits for Cu		Recovery = 99.34%						
Fe†	9287.8	9.63	mg/L	0.619	9.63	mg/L	0.619	6.43%
QC value within limits for Fe		Recovery = 96.35%						
K†	110810.7	99.6	mg/L	0.73	99.6	mg/L	0.73	0.73%
QC value within limits for K		Recovery = 99.55%						
Mg†	322025.1	99.3	mg/L	0.79	99.3	mg/L	0.79	0.80%
QC value within limits for Mg		Recovery = 99.29%						
Mn†	5390636.4	9.98	mg/L	0.029	9.98	mg/L	0.029	0.29%
QC value within limits for Mn		Recovery = 99.81%						
Mo†	107074.5	9.82	mg/L	0.032	9.82	mg/L	0.032	0.32%
QC value within limits for Mo		Recovery = 98.19%						
Na†	215926.1	98.5	mg/L	0.38	98.5	mg/L	0.38	0.39%
QC value within limits for Na		Recovery = 98.45%						
Ni†	207133.4	9.81	mg/L	0.027	9.81	mg/L	0.027	0.28%
QC value within limits for Ni		Recovery = 98.15%						
Pb†	43987.9	9.72	mg/L	0.149	9.72	mg/L	0.149	1.54%
QC value within limits for Pb		Recovery = 97.22%						
Sb†	17545.2	9.55	mg/L	0.212	9.55	mg/L	0.212	2.22%
QC value within limits for Sb		Recovery = 95.53%						
Se†	11668.8	9.71	mg/L	0.186	9.71	mg/L	0.186	1.91%
QC value within limits for Se		Recovery = 97.12%						
Tl†	25180.5	9.77	mg/L	0.128	9.77	mg/L	0.128	1.31%
QC value within limits for Tl		Recovery = 97.67%						
V†	1532658.2	9.88	mg/L	0.033	9.88	mg/L	0.033	0.33%
QC value within limits for V		Recovery = 98.82%						
Zn†	437976.6	9.76	mg/L	0.035	9.76	mg/L	0.035	0.36%
QC value within limits for Zn		Recovery = 97.61%						
Alx†	783591.7	9860	ug/L	83.7	9.86	mg/L	0.084	0.85%
QC value within limits for Alx		Recovery = 98.60%						
Bex†	11390361.8	4000	ug/L	123.0	4.00	mg/L	0.123	3.08%
QC value within limits for Bex		Recovery = 99.89%						

All analyte(s) passed QC.

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

Autosampler Location: 9
Date Collected: 7/12/2007 22:43:30
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LINEARITY

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: LINEARITY

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	356790.1	85.5	%	1.06				1.24%
Yr	146468.0	85.1	%	0.85				0.99%
Ag†	-9420.1	-0.0370	mg/L	0.00032	-0.0370	mg/L	0.00032	0.88%
QC value within limits for Ag		Recovery = Not calculated						
Al†	20.2	0.00643	mg/L	0.009879	0.00643	mg/L	0.009879	153.76%
QC value within limits for Al		Recovery = Not calculated						
As†	-194.4	-0.0459	mg/L	0.00266	-0.0459	mg/L	0.00266	5.81%
QC value within limits for As		Recovery = Not calculated						
B_†	519.1	0.0171	mg/L	0.00227	0.0171	mg/L	0.00227	13.27%
QC value within limits for B_		Recovery = Not calculated						
Ba†	117.0	0.00175	mg/L	0.000066	0.00175	mg/L	0.000066	3.76%
QC value within limits for Ba		Recovery = Not calculated						
Be†	-571.2	-0.00020	mg/L	0.000017	-0.00020	mg/L	0.000017	8.48%
QC value within limits for Be		Recovery = Not calculated						
Ca†	1757308.9	297	mg/L	3.2	297	mg/L	3.2	1.08%
QC value within limits for Ca		Recovery = 99.05%						
Cd†	-22.5	0.00090	mg/L	0.000309	0.00090	mg/L	0.000309	34.18%
QC value within limits for Cd		Recovery = Not calculated						
Co†	52.0	0.00216	mg/L	0.000290	0.00216	mg/L	0.000290	13.43%
QC value within limits for Co		Recovery = Not calculated						
Cr†	179.1	0.00240	mg/L	0.000270	0.00240	mg/L	0.000270	11.24%
QC value within limits for Cr		Recovery = Not calculated						
Cu†	-4207.9	-0.0125	mg/L	0.00019	-0.0125	mg/L	0.00019	1.50%
QC value within limits for Cu		Recovery = Not calculated						
Fe†	93186.6	96.7	mg/L	0.45	96.7	mg/L	0.45	0.46%
QC value within limits for Fe		Recovery = 96.67%						
K†	343252.2	308	mg/L	3.1	308	mg/L	3.1	1.01%
QC value within limits for K		Recovery = 102.79%						
Mg†	624220.2	192	mg/L	2.1	192	mg/L	2.1	1.07%
QC value within limits for Mg		Recovery = Not calculated						
Mn†	1754.0	0.00325	mg/L	0.000097	0.00325	mg/L	0.000097	2.99%
QC value within limits for Mn		Recovery = Not calculated						
Mo†	-7.1	-0.00066	mg/L	0.000325	-0.00066	mg/L	0.000325	49.56%
QC value within limits for Mo		Recovery = Not calculated						
Na†	667786.8	304	mg/L	2.7	304	mg/L	2.7	0.90%
QC value within limits for Na		Recovery = 101.49%						
Ni†	8.9	0.00042	mg/L	0.000224	0.00042	mg/L	0.000224	52.95%
QC value within limits for Ni		Recovery = Not calculated						
Pb†	-18.9	-0.00418	mg/L	0.000581	-0.00418	mg/L	0.000581	13.89%
QC value within limits for Pb		Recovery = Not calculated						
Sb†	25.1	0.0138	mg/L	0.00387	0.0138	mg/L	0.00387	27.93%
QC value within limits for Sb		Recovery = Not calculated						
Se†	-318.1	-0.0761	mg/L	0.00256	-0.0761	mg/L	0.00256	3.37%
QC value within limits for Se		Recovery = Not calculated						
Tl†	58.0	0.0224	mg/L	0.00115	0.0224	mg/L	0.00115	5.11%
QC value within limits for Tl		Recovery = Not calculated						
V†	-381.5	-0.00243	mg/L	0.000138	-0.00243	mg/L	0.000138	5.68%
QC value within limits for V		Recovery = Not calculated						
Zn†	882.4	0.0198	mg/L	0.00013	0.0198	mg/L	0.00013	0.66%
QC value within limits for Zn		Recovery = Not calculated						
Alx†	203.2	2.56	ug/L	0.087	0.00256	mg/L	0.000087	3.42%
QC value within limits for Alx		Recovery = Not calculated						
Bex†	-571.2	-0.200	ug/L	0.0170	-0.00020	mg/L	0.000017	8.48%
QC value within limits for Bex		Recovery = Not calculated						

All analyte(s) passed QC.

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

Autosampler Location: 10
Date Collected: 7/12/2007 22:47:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	369339.0	88.5	%	0.40				0.45%
Yr	151246.8	87.9	%	0.60				0.68%
Ag†	-9232.0	-0.0362	mg/L	0.00014	-0.0362	mg/L	0.00014	0.39%
QC value within limits for Ag		Recovery = Not calculated						
Al†	749916.7	239	mg/L	0.8	239	mg/L	0.8	0.35%
QC value within limits for Al		Recovery = 95.55%						
As†	-426.9	-0.171	mg/L	0.0097	-0.171	mg/L	0.0097	5.68%
QC value within limits for As		Recovery = Not calculated						
B_†	2102.2	0.0692	mg/L	0.00057	0.0692	mg/L	0.00057	0.82%
QC value within limits for B_		Recovery = Not calculated						
Ba†	131.4	0.00197	mg/L	0.000039	0.00197	mg/L	0.000039	2.00%
QC value within limits for Ba		Recovery = Not calculated						
Be†	-765.7	-0.00027	mg/L	0.000017	-0.00027	mg/L	0.000017	6.39%
QC value within limits for Be		Recovery = Not calculated						
Ca†	1469616.7	249	mg/L	1.7	249	mg/L	1.7	0.69%
QC value within limits for Ca		Recovery = 99.40%						
Cd†	-35.8	0.00253	mg/L	0.000093	0.00253	mg/L	0.000093	3.70%
QC value within limits for Cd		Recovery = Not calculated						
Co†	34.7	0.00144	mg/L	0.000101	0.00144	mg/L	0.000101	7.01%
QC value within limits for Co		Recovery = Not calculated						
Cr†	-64.0	-0.00086	mg/L	0.000101	-0.00086	mg/L	0.000101	11.72%
QC value within limits for Cr		Recovery = Not calculated						
Cu†	-4561.0	-0.0136	mg/L	0.00014	-0.0136	mg/L	0.00014	1.02%
QC value within limits for Cu		Recovery = Not calculated						
Fe†	92899.6	96.4	mg/L	0.01	96.4	mg/L	0.01	0.01%
QC value within limits for Fe		Recovery = 96.37%						
K†	619.0	0.556	mg/L	0.0034	0.556	mg/L	0.0034	0.61%
QC value within limits for K		Recovery = Not calculated						
Mg†	778561.0	240	mg/L	1.6	240	mg/L	1.6	0.68%
QC value within limits for Mg		Recovery = 96.02%						
Mn†	1225.2	0.00227	mg/L	0.000156	0.00227	mg/L	0.000156	6.87%
QC value within limits for Mn		Recovery = Not calculated						
Mo†	-27.8	-0.00255	mg/L	0.000552	-0.00255	mg/L	0.000552	21.63%
QC value within limits for Mo		Recovery = Not calculated						
Na†	364.5	0.166	mg/L	0.0201	0.166	mg/L	0.0201	12.11%
QC value within limits for Na		Recovery = Not calculated						
Ni†	-19.5	-0.00093	mg/L	0.000460	-0.00093	mg/L	0.000460	49.72%
QC value within limits for Ni		Recovery = Not calculated						
Pb†	-161.7	-0.0357	mg/L	0.00098	-0.0357	mg/L	0.00098	2.74%
QC value within limits for Pb		Recovery = Not calculated						
Sb†	14.3	0.00792	mg/L	0.000175	0.00792	mg/L	0.000175	2.20%
QC value within limits for Sb		Recovery = Not calculated						
Se†	-337.2	-0.0925	mg/L	0.01216	-0.0925	mg/L	0.01216	13.15%
QC value within limits for Se		Recovery = Not calculated						
Tl†	39.9	0.0154	mg/L	0.00309	0.0154	mg/L	0.00309	20.06%
QC value within limits for Tl		Recovery = Not calculated						
V†	-377.3	-0.00242	mg/L	0.000043	-0.00242	mg/L	0.000043	1.78%
QC value within limits for V		Recovery = Not calculated						
Zn†	687.3	0.0154	mg/L	0.00017	0.0154	mg/L	0.00017	1.08%
QC value within limits for Zn		Recovery = Not calculated						
Alx†	Saturated2							
Unable to evaluate QC.								
Bex†	-765.7	-0.269	ug/L	0.0172	-0.00027	mg/L	0.000017	6.39%
QC value within limits for Bex		Recovery = Not calculated						

All analyte(s) passed QC. One or more analytes were not evaluated.

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

Autosampler Location: 11
Date Collected: 7/12/2007 22:51:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	363207.1	87.1	%	0.49				0.56%
Yr	148497.2	86.3	%	1.32				1.53%
Agf	-100.2	-0.00039	mg/L	0.000727	-0.00039	mg/L	0.000727	184.98%
QC value less than the lower limit for Ag Recovery = -0.08%								
Alf	756491.7	241	mg/L	1.3	241	mg/L	1.3	0.55%
QC value within limits for Al Recovery = 96.39%								
Asf	-426.3	-0.170	mg/L	0.0034	-0.170	mg/L	0.0034	1.99%
QC value less than the lower limit for As Recovery = Not calculated								
B_f	1950.1	0.0637	mg/L	0.00218	0.0637	mg/L	0.00218	3.43%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Baf	17213.8	0.258	mg/L	0.0006	0.258	mg/L	0.0006	0.24%
QC value within limits for Ba Recovery = 103.24%								
Bef	701290.0	0.246	mg/L	0.0002	0.246	mg/L	0.0002	0.07%
QC value within limits for Be Recovery = 98.40%								
Caf	1478066.9	250	mg/L	2.0	250	mg/L	2.0	0.79%
QC value within limits for Ca Recovery = 99.97%								
Cdf	12168.0	0.502	mg/L	0.0019	0.502	mg/L	0.0019	0.37%
QC value within limits for Cd Recovery = 100.48%								
Cof	5751.4	0.239	mg/L	0.0009	0.239	mg/L	0.0009	0.39%
QC value within limits for Co Recovery = 95.64%								
Crf	18449.0	0.248	mg/L	0.0001	0.248	mg/L	0.0001	0.03%
QC value within limits for Cr Recovery = 99.08%								
Cuf	80451.0	0.239	mg/L	0.0004	0.239	mg/L	0.0004	0.16%
QC value within limits for Cu Recovery = 95.77%								
Fef	93849.4	97.4	mg/L	0.10	97.4	mg/L	0.10	0.10%
QC value within limits for Fe Recovery = 97.36%								
Kf	213.6	0.192	mg/L	0.0114	0.192	mg/L	0.0114	5.96%
QC value within limits for K Recovery = Not calculated								
Mgf	785158.8	242	mg/L	1.7	242	mg/L	1.7	0.71%
QC value within limits for Mg Recovery = 96.83%								
Mnf	138819.4	0.257	mg/L	0.0002	0.257	mg/L	0.0002	0.07%
QC value within limits for Mn Recovery = 102.81%								
Mof	-18.6	-0.00170	mg/L	0.000455	-0.00170	mg/L	0.000455	26.74%
QC value within limits for Mo Recovery = Not calculated								
Naf	119.5	0.0545	mg/L	0.03162	0.0545	mg/L	0.03162	58.06%
QC value within limits for Na Recovery = Not calculated								
Nif	9852.9	0.467	mg/L	0.0013	0.467	mg/L	0.0013	0.27%
QC value within limits for Ni Recovery = 93.37%								
Pbf	2074.1	0.458	mg/L	0.0017	0.458	mg/L	0.0017	0.37%
QC value within limits for Pb Recovery = 91.68%								
Sbf	31.1	0.0133	mg/L	0.01042	0.0133	mg/L	0.01042	78.59%
QC value within limits for Sb Recovery = Not calculated								
Sef	-332.2	-0.0864	mg/L	0.00827	-0.0864	mg/L	0.00827	9.57%
QC value within limits for Se Recovery = Not calculated								
Tlf	33.3	0.0136	mg/L	0.00304	0.0136	mg/L	0.00304	22.47%
QC value within limits for Tl Recovery = Not calculated								
Vf	38101.6	0.246	mg/L	0.0005	0.246	mg/L	0.0005	0.20%
QC value within limits for V Recovery = 98.27%								
Znf	23627.4	0.527	mg/L	0.0012	0.527	mg/L	0.0012	0.23%
QC value within limits for Zn Recovery = 105.40%								
Alxf	Saturated2							
Unable to evaluate QC.								
Bexf	701290.0	246	ug/L	0.2	0.246	mg/L	0.0002	0.07%
QC value within limits for Bex Recovery = 98.40%								

QC Failed. Continue with analysis.

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

Autosampler Location: 0
Date Collected: 7/12/2007 22:54:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Wash

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: Wash

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	386545.5	92.7	%	0.83				0.89%
Yr	152989.4	88.9	%	0.24				0.27%
Ag†	-91.0	-0.00036	mg/L	0.000010	-0.00036	mg/L	0.000010	2.85%
QC value within limits for Ag		Recovery = Not calculated						
Al†	27.1	0.00863	mg/L	0.003697	0.00863	mg/L	0.003697	42.82%
QC value within limits for Al		Recovery = Not calculated						
As†	-4.2	-0.00227	mg/L	0.001173	-0.00227	mg/L	0.001173	51.65%
QC value within limits for As		Recovery = Not calculated						
B_†	52.8	0.00174	mg/L	0.000263	0.00174	mg/L	0.000263	15.11%
QC value within limits for B_		Recovery = Not calculated						
Ba†	0.3	0.00000	mg/L	0.000111	0.00000	mg/L	0.000111	>999.9%
QC value within limits for Ba		Recovery = Not calculated						
Be†	-142.1	-0.00005	mg/L	0.000034	-0.00005	mg/L	0.000034	68.73%
QC value within limits for Be		Recovery = Not calculated						
Ca†	-14.1	-0.00238	mg/L	0.000251	-0.00238	mg/L	0.000251	10.58%
QC value within limits for Ca		Recovery = Not calculated						
Cd†	4.9	0.00024	mg/L	0.000105	0.00024	mg/L	0.000105	43.53%
QC value within limits for Cd		Recovery = Not calculated						
Co†	-1.7	-0.00007	mg/L	0.000322	-0.00007	mg/L	0.000322	460.57%
QC value within limits for Co		Recovery = Not calculated						
Cr†	12.3	0.00017	mg/L	0.000150	0.00017	mg/L	0.000150	90.67%
QC value within limits for Cr		Recovery = Not calculated						
Cu†	49.3	0.00015	mg/L	0.000139	0.00015	mg/L	0.000139	95.22%
QC value within limits for Cu		Recovery = Not calculated						
Fe†	2.1	0.00222	mg/L	0.002329	0.00222	mg/L	0.002329	104.94%
QC value within limits for Fe		Recovery = Not calculated						
K†	-22.8	-0.0205	mg/L	0.07465	-0.0205	mg/L	0.07465	365.01%
QC value within limits for K		Recovery = Not calculated						
Mg†	-1.8	-0.00055	mg/L	0.000458	-0.00055	mg/L	0.000458	83.70%
QC value within limits for Mg		Recovery = Not calculated						
Mn†	11.1	0.00002	mg/L	0.000020	0.00002	mg/L	0.000020	98.89%
QC value within limits for Mn		Recovery = Not calculated						
Mo†	-2.6	-0.00024	mg/L	0.000275	-0.00024	mg/L	0.000275	114.11%
QC value within limits for Mo		Recovery = Not calculated						
Na†	-81.4	-0.0371	mg/L	0.01805	-0.0371	mg/L	0.01805	48.65%
QC value within limits for Na		Recovery = Not calculated						
Ni†	-11.0	-0.00052	mg/L	0.000048	-0.00052	mg/L	0.000048	9.08%
QC value within limits for Ni		Recovery = Not calculated						
Pb†	6.3	0.00139	mg/L	0.001089	0.00139	mg/L	0.001089	78.38%
QC value within limits for Pb		Recovery = Not calculated						
Sb†	-1.5	-0.00082	mg/L	0.003368	-0.00082	mg/L	0.003368	412.70%
QC value within limits for Sb		Recovery = Not calculated						
Se†	-2.2	-0.00186	mg/L	0.008510	-0.00186	mg/L	0.008510	456.98%
QC value within limits for Se		Recovery = Not calculated						
Tl†	10.5	0.00404	mg/L	0.003318	0.00404	mg/L	0.003318	82.07%
QC value within limits for Tl		Recovery = Not calculated						
V†	30.7	0.00020	mg/L	0.000146	0.00020	mg/L	0.000146	73.77%
QC value within limits for V		Recovery = Not calculated						
Zn†	10.9	0.00025	mg/L	0.000087	0.00025	mg/L	0.000087	35.23%
QC value within limits for Zn		Recovery = Not calculated						
Alx†	-56.7	-0.714	ug/L	1.5919	-0.00071	mg/L	0.001592	222.95%
QC value within limits for Alx		Recovery = Not calculated						
Bex†	-142.1	-0.0498	ug/L	0.03426	-0.00005	mg/L	0.000034	68.73%
QC value within limits for Bex		Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: QC-25 1ppm
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 7/12/2007 22:58:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: QC-25 1ppm

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: QC-25 1ppm

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	408528.1	97.9	%	0.74				0.75%
Yr	157924.3	91.8	%	0.47				0.52%
Agt	209886.2	0.824	mg/L	0.0071	0.824	mg/L	0.0071	0.86%
QC value less than the lower limit for Ag Recovery = 82.40%								
Alt	3094.7	0.986	mg/L	0.0098	0.986	mg/L	0.0098	0.99%
QC value within limits for Al Recovery = 98.57%								
Ast	1720.5	0.923	mg/L	0.0068	0.923	mg/L	0.0068	0.73%
QC value within limits for As Recovery = 92.30%								
B_t	27602.5	0.907	mg/L	0.0042	0.907	mg/L	0.0042	0.46%
QC value within limits for B_ Recovery = 90.69%								
Bat	68553.5	1.03	mg/L	0.007	1.03	mg/L	0.007	0.69%
QC value within limits for Ba Recovery = 102.79%								
Bet	2681585.7	0.941	mg/L	0.0002	0.941	mg/L	0.0002	0.02%
QC value within limits for Be Recovery = 94.06%								
Cat	6021.6	1.02	mg/L	0.003	1.02	mg/L	0.003	0.31%
QC value within limits for Ca Recovery = 101.82%								
Cdt	23383.4	0.944	mg/L	0.0076	0.944	mg/L	0.0076	0.80%
QC value within limits for Cd Recovery = 94.39%								
Cot	24490.1	1.02	mg/L	0.006	1.02	mg/L	0.006	0.58%
QC value within limits for Co Recovery = 101.81%								
Crt	72983.3	0.980	mg/L	0.0071	0.980	mg/L	0.0071	0.72%
QC value within limits for Cr Recovery = 97.99%								
Cut	320450.7	0.954	mg/L	0.0113	0.954	mg/L	0.0113	1.18%
QC value within limits for Cu Recovery = 95.37%								
Fet	962.1	0.998	mg/L	0.0028	0.998	mg/L	0.0028	0.28%
QC value within limits for Fe Recovery = 99.81%								
Kt	10686.0	9.60	mg/L	0.005	9.60	mg/L	0.005	0.05%
QC value within limits for K Recovery = 96.00%								
Mgt	3441.8	1.06	mg/L	0.001	1.06	mg/L	0.001	0.05%
QC value within limits for Mg Recovery = 106.12%								
Mnt	553885.3	1.03	mg/L	0.002	1.03	mg/L	0.002	0.20%
QC value within limits for Mn Recovery = 102.55%								
Mot	10250.8	0.940	mg/L	0.0091	0.940	mg/L	0.0091	0.97%
QC value within limits for Mo Recovery = 94.00%								
Nat	2161.2	0.985	mg/L	0.0060	0.985	mg/L	0.0060	0.61%
QC value within limits for Na Recovery = 98.54%								
Nit	21634.7	1.03	mg/L	0.005	1.03	mg/L	0.005	0.46%
QC value within limits for Ni Recovery = 102.51%								
Pbt	4632.4	1.02	mg/L	0.010	1.02	mg/L	0.010	0.96%
QC value within limits for Pb Recovery = 102.39%								
Sbt	1682.2	0.915	mg/L	0.0076	0.915	mg/L	0.0076	0.84%
QC value within limits for Sb Recovery = 91.51%								
Set	1077.9	0.897	mg/L	0.0127	0.897	mg/L	0.0127	1.42%
QC value less than the lower limit for Se Recovery = 89.73%								
Tlt	2657.4	1.03	mg/L	0.009	1.03	mg/L	0.009	0.90%
QC value within limits for Tl Recovery = 103.04%								
Vt	147027.6	0.948	mg/L	0.0076	0.948	mg/L	0.0076	0.80%
QC value within limits for V Recovery = 94.82%								
Znt	44264.1	0.986	mg/L	0.0082	0.986	mg/L	0.0082	0.83%
QC value within limits for Zn Recovery = 98.63%								
Alxt	71912.4	905	ug/L	1.4	0.905	mg/L	0.0014	0.16%
QC value within limits for Alx Recovery = 90.48%								
Bext	2681585.7	941	ug/L	0.2	0.941	mg/L	0.0002	0.02%
QC value within limits for Bex Recovery = 94.06%								

QC Failed. Retry.

Sequence No.: 9
Sample ID: QC-25 1ppm
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 7/12/2007 23:01:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: QC-25 1ppm

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: QC-25 1ppm

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	406575.0	97.5	%	0.19				0.20%
Yr	158737.2	92.2	%	0.87				0.94%
Ag†	205972.6	0.809	mg/L	0.0000	0.809	mg/L	0.0000	0.00%
QC value less than the lower limit for Ag Recovery = 80.87%								
Al†	3102.5	0.988	mg/L	0.0031	0.988	mg/L	0.0031	0.31%
QC value within limits for Al Recovery = 98.82%								
As†	1739.6	0.933	mg/L	0.0085	0.933	mg/L	0.0085	0.91%
QC value within limits for As Recovery = 93.33%								
B_†	27900.1	0.917	mg/L	0.0058	0.917	mg/L	0.0058	0.64%
QC value within limits for B_ Recovery = 91.67%								
Ba†	68976.4	1.03	mg/L	0.001	1.03	mg/L	0.001	0.08%
QC value within limits for Ba Recovery = 103.42%								
Be†	2670036.2	0.937	mg/L	0.0032	0.937	mg/L	0.0032	0.34%
QC value within limits for Be Recovery = 93.66%								
Ca†	5947.0	1.01	mg/L	0.012	1.01	mg/L	0.012	1.20%
QC value within limits for Ca Recovery = 100.56%								
Cd†	23563.4	0.951	mg/L	0.0008	0.951	mg/L	0.0008	0.09%
QC value within limits for Cd Recovery = 95.11%								
Co†	24620.0	1.02	mg/L	0.005	1.02	mg/L	0.005	0.49%
QC value within limits for Co Recovery = 102.35%								
Cr†	73290.5	0.984	mg/L	0.0030	0.984	mg/L	0.0030	0.30%
QC value within limits for Cr Recovery = 98.40%								
Cu†	322561.6	0.960	mg/L	0.0011	0.960	mg/L	0.0011	0.11%
QC value within limits for Cu Recovery = 96.00%								
Fe†	950.1	0.986	mg/L	0.0094	0.986	mg/L	0.0094	0.96%
QC value within limits for Fe Recovery = 98.56%								
K†	10696.2	9.61	mg/L	0.032	9.61	mg/L	0.032	0.33%
QC value within limits for K Recovery = 96.10%								
Mg†	3402.7	1.05	mg/L	0.008	1.05	mg/L	0.008	0.75%
QC value within limits for Mg Recovery = 104.91%								
Mn†	554366.0	1.03	mg/L	0.003	1.03	mg/L	0.003	0.34%
QC value within limits for Mn Recovery = 102.64%								
Mo†	10390.2	0.953	mg/L	0.0084	0.953	mg/L	0.0084	0.88%
QC value within limits for Mo Recovery = 95.28%								
Na†	2197.0	1.00	mg/L	0.002	1.00	mg/L	0.002	0.20%
QC value within limits for Na Recovery = 100.18%								
Ni†	21654.2	1.03	mg/L	0.004	1.03	mg/L	0.004	0.40%
QC value within limits for Ni Recovery = 102.61%								
Pb†	4692.9	1.04	mg/L	0.009	1.04	mg/L	0.009	0.82%
QC value within limits for Pb Recovery = 103.72%								
Sb†	1701.9	0.926	mg/L	0.0104	0.926	mg/L	0.0104	1.12%
QC value within limits for Sb Recovery = 92.59%								
Se†	1089.4	0.907	mg/L	0.0040	0.907	mg/L	0.0040	0.45%
QC value within limits for Se Recovery = 90.68%								
Tl†	2693.3	1.04	mg/L	0.004	1.04	mg/L	0.004	0.41%
QC value within limits for Tl Recovery = 104.43%								
V†	147341.2	0.950	mg/L	0.0034	0.950	mg/L	0.0034	0.36%
QC value within limits for V Recovery = 95.02%								
Zn†	44360.6	0.988	mg/L	0.0021	0.988	mg/L	0.0021	0.21%
QC value within limits for Zn Recovery = 98.84%								
Alx†	72483.4	912	ug/L	0.2	0.912	mg/L	0.0002	0.02%
QC value within limits for Alx Recovery = 91.20%								
Bex†	2670036.2	937	ug/L	3.2	0.937	mg/L	0.0032	0.34%

QC value within limits for Bex Recovery = 93.66%
QC Failed. Continue with analysis.

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

Autosampler Location: 4
Date Collected: 7/12/2007 23:05:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	392941.8	94.2	%	0.26				0.27%
Yr	157051.1	91.3	%	0.28				0.30%
Ag†	216736.8	0.851	mg/L	0.0002	0.851	mg/L	0.0002	0.02%
QC value within limits for Ag		Recovery = 85.09%						
Al†	15341.1	4.89	mg/L	0.011	4.89	mg/L	0.011	0.22%
QC value within limits for Al		Recovery = 97.73%						
As†	8583.9	4.61	mg/L	0.002	4.61	mg/L	0.002	0.05%
QC value within limits for As		Recovery = 92.10%						
B_†	73114.8	2.40	mg/L	0.000	2.40	mg/L	0.000	0.00%
QC value within limits for B_		Recovery = 95.91%						
Ba†	329282.6	4.94	mg/L	0.009	4.94	mg/L	0.009	0.19%
QC value within limits for Ba		Recovery = 98.74%						
Be†	5611020.6	1.97	mg/L	0.009	1.97	mg/L	0.009	0.48%
QC value within limits for Be		Recovery = 98.41%						
Ca†	297403.7	50.3	mg/L	0.18	50.3	mg/L	0.18	0.35%
QC value within limits for Ca		Recovery = 100.58%						
Cd†	60078.1	2.40	mg/L	0.004	2.40	mg/L	0.004	0.18%
QC value within limits for Cd		Recovery = 95.81%						
Co†	119018.9	4.95	mg/L	0.004	4.95	mg/L	0.004	0.08%
QC value within limits for Co		Recovery = 98.96%						
Cr†	363940.5	4.89	mg/L	0.001	4.89	mg/L	0.001	0.01%
QC value within limits for Cr		Recovery = 97.72%						
Cu†	1621635.1	4.83	mg/L	0.008	4.83	mg/L	0.008	0.17%
QC value within limits for Cu		Recovery = 96.52%						
Fe†	4805.2	4.98	mg/L	0.001	4.98	mg/L	0.001	0.01%
QC value within limits for Fe		Recovery = 99.70%						
K†	53700.2	48.2	mg/L	0.31	48.2	mg/L	0.31	0.64%
QC value within limits for K		Recovery = 96.49%						
Mg†	165071.7	50.9	mg/L	0.18	50.9	mg/L	0.18	0.35%
QC value within limits for Mg		Recovery = 101.79%						
Mn†	2698993.3	5.00	mg/L	0.005	5.00	mg/L	0.005	0.11%
QC value within limits for Mn		Recovery = 99.94%						
Mo†	53285.2	4.89	mg/L	0.007	4.89	mg/L	0.007	0.14%
QC value within limits for Mo		Recovery = 97.73%						
Na†	105678.5	48.2	mg/L	0.31	48.2	mg/L	0.31	0.64%
QC value within limits for Na		Recovery = 96.37%						
Ni†	105561.4	5.00	mg/L	0.001	5.00	mg/L	0.001	0.03%
QC value within limits for Ni		Recovery = 100.04%						
Pb†	22343.7	4.94	mg/L	0.014	4.94	mg/L	0.014	0.28%
QC value within limits for Pb		Recovery = 98.77%						
Sb†	8492.9	4.62	mg/L	0.002	4.62	mg/L	0.002	0.04%
QC value within limits for Sb		Recovery = 92.43%						
Se†	5764.5	4.80	mg/L	0.009	4.80	mg/L	0.009	0.19%
QC value within limits for Se		Recovery = 95.96%						
Tl†	13085.8	5.07	mg/L	0.004	5.07	mg/L	0.004	0.08%
QC value within limits for Tl		Recovery = 101.50%						
V†	762064.4	4.91	mg/L	0.003	4.91	mg/L	0.003	0.07%
QC value within limits for V		Recovery = 98.27%						
Zn†	222514.0	4.96	mg/L	0.003	4.96	mg/L	0.003	0.05%
QC value within limits for Zn		Recovery = 99.18%						
Alx†	375081.5	4720	ug/L	23.8	4.72	mg/L	0.024	0.50%
QC value within limits for Alx		Recovery = 94.39%						
Bex†	5611020.6	1970	ug/L	9.4	1.97	mg/L	0.009	0.48%
QC value within limits for Bex		Recovery = 98.41%						

All analyte(s) passed QC.

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

Autosampler Location: 0
Date Collected: 7/12/2007 23:09:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	395013.7	94.7	%	0.61				0.64%
Yr	154350.7	89.7	%	2.05				2.28%
Ag†	646.6	0.00254	mg/L	0.000343	0.00254	mg/L	0.000343	13.50%
QC value within limits for Ag		Recovery = Not calculated						
Al†	-13.9	-0.00443	mg/L	0.006584	-0.00443	mg/L	0.006584	148.61%
QC value within limits for Al		Recovery = Not calculated						
As†	32.1	0.0172	mg/L	0.00211	0.0172	mg/L	0.00211	12.23%
QC value within limits for As		Recovery = Not calculated						
B_†	362.4	0.0119	mg/L	0.00085	0.0119	mg/L	0.00085	7.16%
QC value within limits for B_		Recovery = Not calculated						
Ba†	6.3	0.00009	mg/L	0.000062	0.00009	mg/L	0.000062	65.29%
QC value within limits for Ba		Recovery = Not calculated						
Be†	-36.6	-0.00001	mg/L	0.000016	-0.00001	mg/L	0.000016	122.15%
QC value within limits for Be		Recovery = Not calculated						
Ca†	-10.0	-0.00169	mg/L	0.001506	-0.00169	mg/L	0.001506	89.12%
QC value within limits for Ca		Recovery = Not calculated						
Cd†	11.7	0.00018	mg/L	0.000037	0.00018	mg/L	0.000037	20.78%
QC value within limits for Cd		Recovery = Not calculated						
Co†	-0.6	-0.00003	mg/L	0.000128	-0.00003	mg/L	0.000128	510.83%
QC value within limits for Co		Recovery = Not calculated						
Cr†	12.0	0.00016	mg/L	0.000109	0.00016	mg/L	0.000109	67.78%
QC value within limits for Cr		Recovery = Not calculated						
Cu†	29.1	0.00009	mg/L	0.000257	0.00009	mg/L	0.000257	296.88%
QC value within limits for Cu		Recovery = Not calculated						
Fe†	0.5	0.00056	mg/L	0.004063	0.00056	mg/L	0.004063	720.51%
QC value within limits for Fe		Recovery = Not calculated						
K†	-11.7	-0.0105	mg/L	0.07147	-0.0105	mg/L	0.07147	681.15%
QC value within limits for K		Recovery = Not calculated						
Mg†	-1.6	-0.00049	mg/L	0.000475	-0.00049	mg/L	0.000475	97.14%
QC value within limits for Mg		Recovery = Not calculated						
Mn†	106.5	0.00020	mg/L	0.000029	0.00020	mg/L	0.000029	14.74%
QC value within limits for Mn		Recovery = Not calculated						
Mo†	3.0	0.00028	mg/L	0.000018	0.00028	mg/L	0.000018	6.58%
QC value within limits for Mo		Recovery = Not calculated						
Na†	-116.9	-0.0533	mg/L	0.00667	-0.0533	mg/L	0.00667	12.52%
QC value within limits for Na		Recovery = Not calculated						
Ni†	-8.6	-0.00041	mg/L	0.000146	-0.00041	mg/L	0.000146	35.94%
QC value within limits for Ni		Recovery = Not calculated						
Pb†	3.7	0.00081	mg/L	0.000472	0.00081	mg/L	0.000472	58.03%
QC value within limits for Pb		Recovery = Not calculated						
Sb†	17.9	0.00989	mg/L	0.002763	0.00989	mg/L	0.002763	27.93%
QC value within limits for Sb		Recovery = Not calculated						
Se†	6.9	0.00570	mg/L	0.003135	0.00570	mg/L	0.003135	54.98%
QC value within limits for Se		Recovery = Not calculated						
Tl†	6.7	0.00260	mg/L	0.003011	0.00260	mg/L	0.003011	115.88%
QC value within limits for Tl		Recovery = Not calculated						
V†	33.8	0.00022	mg/L	0.000029	0.00022	mg/L	0.000029	13.27%
QC value within limits for V		Recovery = Not calculated						
Zn†	15.8	0.00036	mg/L	0.000063	0.00036	mg/L	0.000063	17.72%
QC value within limits for Zn		Recovery = Not calculated						
Alx†	-15.7	-0.198	ug/L	0.4051	-0.00020	mg/L	0.000405	204.67%
QC value within limits for Alx		Recovery = Not calculated						
Bex†	-36.6	-0.0128	ug/L	0.01569	-0.00001	mg/L	0.000016	122.15%
QC value within limits for Bex		Recovery = Not calculated						

All analyte(s) passed QC.

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

Autosampler Location: 20
Date Collected: 7/12/2007 23:12:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MRL

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	396109.2	95.0	%	0.05				0.05%
Yr	158691.5	92.2	%	0.00				0.00%
Ag†	3079.2	0.0121	mg/L	0.00027	0.0121	mg/L	0.00027	2.22%
QC value within limits for Ag		Recovery = 120.89%						
Al†	165.1	0.0526	mg/L	0.02643	0.0526	mg/L	0.02643	50.27%
QC value within limits for Al		Recovery = 105.15%						
As†	185.0	0.0992	mg/L	0.00026	0.0992	mg/L	0.00026	0.27%
QC value within limits for As		Recovery = 99.24%						
B_†	1626.6	0.0535	mg/L	0.00011	0.0535	mg/L	0.00011	0.21%
QC value within limits for B_		Recovery = 106.93%						
Ba†	1349.0	0.0202	mg/L	0.00001	0.0202	mg/L	0.00001	0.04%
QC value within limits for Ba		Recovery = 101.13%						
Be†	2959.7	0.00104	mg/L	0.000036	0.00104	mg/L	0.000036	3.47%
QC value within limits for Be		Recovery = 103.82%						
Ca†	5950.9	1.01	mg/L	0.007	1.01	mg/L	0.007	0.72%
QC value within limits for Ca		Recovery = 100.63%						
Cd†	145.0	0.00440	mg/L	0.000026	0.00440	mg/L	0.000026	0.59%
QC value within limits for Cd		Recovery = 87.91%						
Co†	1203.3	0.0500	mg/L	0.00011	0.0500	mg/L	0.00011	0.21%
QC value within limits for Co		Recovery = 100.05%						
Cr†	748.6	0.0101	mg/L	0.00005	0.0101	mg/L	0.00005	0.46%
QC value within limits for Cr		Recovery = 100.50%						
Cu†	3335.1	0.00996	mg/L	0.000045	0.00996	mg/L	0.000045	0.46%
QC value within limits for Cu		Recovery = 99.63%						
Fe†	18.9	0.0196	mg/L	0.00406	0.0196	mg/L	0.00406	20.73%
QC value within limits for Fe		Recovery = 97.82%						
K†	1043.1	0.937	mg/L	0.0204	0.937	mg/L	0.0204	2.18%
QC value within limits for K		Recovery = 93.71%						
Mg†	338.0	0.104	mg/L	0.0009	0.104	mg/L	0.0009	0.86%
QC value within limits for Mg		Recovery = 104.20%						
Mn†	1264.9	0.00234	mg/L	0.000015	0.00234	mg/L	0.000015	0.64%
QC value within limits for Mn		Recovery = 117.09%						
Mo†	208.0	0.0191	mg/L	0.00017	0.0191	mg/L	0.00017	0.90%
QC value within limits for Mo		Recovery = 95.38%						
Na†	2008.5	0.916	mg/L	0.0174	0.916	mg/L	0.0174	1.90%
QC value within limits for Na		Recovery = 91.58%						
Ni†	427.5	0.0203	mg/L	0.00042	0.0203	mg/L	0.00042	2.10%
QC value within limits for Ni		Recovery = 101.29%						
Pb†	101.4	0.0224	mg/L	0.00001	0.0224	mg/L	0.00001	0.04%
QC value within limits for Pb		Recovery = 112.05%						
Sb†	89.6	0.0494	mg/L	0.00233	0.0494	mg/L	0.00233	4.73%
QC value within limits for Sb		Recovery = 98.73%						
Se†	117.9	0.0980	mg/L	0.00016	0.0980	mg/L	0.00016	0.16%
QC value within limits for Se		Recovery = 98.00%						
Tl†	284.5	0.110	mg/L	0.0025	0.110	mg/L	0.0025	2.24%
QC value within limits for Tl		Recovery = 110.03%						
V†	335.6	0.00221	mg/L	0.000158	0.00221	mg/L	0.000158	7.15%
QC value within limits for V		Recovery = 110.36%						
Zn†	886.5	0.0198	mg/L	0.00009	0.0198	mg/L	0.00009	0.46%
QC value within limits for Zn		Recovery = 98.77%						
Alx†	3638.4	45.8	ug/L	0.91	0.0458	mg/L	0.00091	1.98%
QC value within limits for Alx		Recovery = 91.56%						
Bex†	2959.7	1.04	ug/L	0.036	0.00104	mg/L	0.000036	3.47%
QC value within limits for Bex		Recovery = 103.82%						

All analyte(s) passed QC.

Sequence No.: 13
Sample ID: FILTERCHECK
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 16
Date Collected: 7/12/2007 23:16:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: FILTERCHECK

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: FILTERCHECK

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	416887.7	99.9	%	64.81				64.85%
Yr	139640.6	81.1	%	8.86				10.92%
Agt	-229.2	-0.00090	mg/L	0.001082	-0.00090	mg/L	0.001082	120.20%
Alt	8.0	0.00254	mg/L	0.005116	0.00254	mg/L	0.005116	201.70%
Ast	3.1	0.00166	mg/L	0.002012	0.00166	mg/L	0.002012	121.47%
B_t	21.3	0.00070	mg/L	0.005420	0.00070	mg/L	0.005420	773.36%
Bat	2.8	0.00004	mg/L	0.000556	0.00004	mg/L	0.000556	>999.9%
Bet	2721.3	0.00095	mg/L	0.000426	0.00095	mg/L	0.000426	44.66%
Cat	431.4	0.0729	mg/L	0.02026	0.0729	mg/L	0.02026	27.78%
Cdt	14.6	0.00057	mg/L	0.001533	0.00057	mg/L	0.001533	270.84%
Cot	-1.8	-0.00007	mg/L	0.002148	-0.00007	mg/L	0.002148	>999.9%
Crt	-52.4	-0.00070	mg/L	0.002163	-0.00070	mg/L	0.002163	307.63%
Cut	-839.6	-0.00250	mg/L	0.001543	-0.00250	mg/L	0.001543	61.82%
Fet	4.3	0.00443	mg/L	0.000882	0.00443	mg/L	0.000882	19.92%
Kt	-18.3	-0.0164	mg/L	0.05043	-0.0164	mg/L	0.05043	306.70%
Mgt	-15.0	-0.00464	mg/L	0.000423	-0.00464	mg/L	0.000423	9.13%
Mnt	-74.2	-0.00014	mg/L	0.000027	-0.00014	mg/L	0.000027	19.89%
Mot	1.4	0.00013	mg/L	0.001254	0.00013	mg/L	0.001254	998.85%
Nat	-93.9	-0.0428	mg/L	0.04200	-0.0428	mg/L	0.04200	98.13%
Nit	-3.4	-0.00016	mg/L	0.002029	-0.00016	mg/L	0.002029	>999.9%
Pbt	16.6	0.00366	mg/L	0.002650	0.00366	mg/L	0.002650	72.35%
Sbt	4.1	0.00230	mg/L	0.002569	0.00230	mg/L	0.002569	111.74%
Set	3.5	0.00293	mg/L	0.003286	0.00293	mg/L	0.003286	112.11%
Tlt	6.8	0.00264	mg/L	0.002440	0.00264	mg/L	0.002440	92.35%
Vt	-87.8	-0.00057	mg/L	0.000199	-0.00057	mg/L	0.000199	35.04%
Znt	24.0	0.00054	mg/L	0.001049	0.00054	mg/L	0.001049	194.35%
Alxt	-219.2	-2.76	ug/L	0.473	-0.00276	mg/L	0.000473	17.14%
Bext	2721.3	0.955	ug/L	0.4263	0.00095	mg/L	0.000426	44.66%

Sequence No.: 14
Sample ID: MRL/2
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 22
Date Collected: 7/12/2007 23:20:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MRL/2

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: MRL/2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	381804.8	91.5	%	1.03				1.12%
Yr	151712.2	88.2	%	2.11				2.39%
Agt	1674.5	0.00657	mg/L	0.000057	0.00657	mg/L	0.000057	0.87%
Alt	81.4	0.0259	mg/L	0.00661	0.0259	mg/L	0.00661	25.50%
Ast	91.4	0.0490	mg/L	0.00205	0.0490	mg/L	0.00205	4.17%
B_t	786.3	0.0258	mg/L	0.00035	0.0258	mg/L	0.00035	1.34%
Bat	690.7	0.0104	mg/L	0.00006	0.0104	mg/L	0.00006	0.62%
Bet	1412.0	0.00050	mg/L	0.000019	0.00050	mg/L	0.000019	3.91%
Cat	3026.3	0.512	mg/L	0.0019	0.512	mg/L	0.0019	0.37%
Cdt	79.6	0.00250	mg/L	0.000315	0.00250	mg/L	0.000315	12.60%
Cot	615.2	0.0256	mg/L	0.00015	0.0256	mg/L	0.00015	0.60%
Crt	395.7	0.00531	mg/L	0.000202	0.00531	mg/L	0.000202	3.80%
Cut	1686.0	0.00504	mg/L	0.000043	0.00504	mg/L	0.000043	0.85%
Fet	8.5	0.00881	mg/L	0.001676	0.00881	mg/L	0.001676	19.03%
Kt	480.3	0.432	mg/L	0.0062	0.432	mg/L	0.0062	1.43%
Mgt	171.3	0.0528	mg/L	0.00115	0.0528	mg/L	0.00115	2.18%
Mnt	673.5	0.00125	mg/L	0.000009	0.00125	mg/L	0.000009	0.74%
Mot	107.0	0.00981	mg/L	0.000157	0.00981	mg/L	0.000157	1.60%
Nat	958.1	0.437	mg/L	0.0154	0.437	mg/L	0.0154	3.53%
Nit	217.6	0.0103	mg/L	0.00018	0.0103	mg/L	0.00018	1.71%
Pbt	51.9	0.0115	mg/L	0.00042	0.0115	mg/L	0.00042	3.69%
Sbt	49.2	0.0271	mg/L	0.00232	0.0271	mg/L	0.00232	8.55%
Set	67.7	0.0562	mg/L	0.00381	0.0562	mg/L	0.00381	6.78%
Tlt	145.9	0.0564	mg/L	0.00072	0.0564	mg/L	0.00072	1.28%
Vt	128.2	0.00085	mg/L	0.000107	0.00085	mg/L	0.000107	12.51%
Znt	461.2	0.0103	mg/L	0.00001	0.0103	mg/L	0.00001	0.07%
Alxt	1904.0	24.0	ug/L	1.13	0.0240	mg/L	0.00113	4.70%
Bext	1412.0	0.495	ug/L	0.0194	0.00050	mg/L	0.000019	3.91%

Sequence No.: 81
Sample ID: MBLANK
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 92
Date Collected: 7/13/2007 03:51:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MBLANK

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: MBLANK

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	417128.6	100.0	%	0.83				0.83%
Yr	161462.5	93.8	%	1.08				1.15%
Agt	-32.3	-0.00013	mg/L	0.000175	-0.00013	mg/L	0.000175	138.10%
Alt	-3.8	-0.00121	mg/L	0.008134	-0.00121	mg/L	0.008134	672.87%
Ast	0.8	0.00042	mg/L	0.000724	0.00042	mg/L	0.000724	173.39%
B_t	-47.0	-0.00155	mg/L	0.000093	-0.00155	mg/L	0.000093	5.99%
Bat	3.5	0.00005	mg/L	0.000059	0.00005	mg/L	0.000059	110.39%
Bet	12.2	0.00000	mg/L	0.000012	0.00000	mg/L	0.000012	270.87%
Cat	32.4	0.00548	mg/L	0.002356	0.00548	mg/L	0.002356	42.98%
Cdt	-3.5	-0.00015	mg/L	0.000194	-0.00015	mg/L	0.000194	128.70%
Cot	-3.9	-0.00016	mg/L	0.000329	-0.00016	mg/L	0.000329	204.90%
Crt	11.1	0.00015	mg/L	0.000024	0.00015	mg/L	0.000024	15.83%
Cut	3.9	0.00001	mg/L	0.000042	0.00001	mg/L	0.000042	361.64%
Fet	1.2	0.00125	mg/L	0.000065	0.00125	mg/L	0.000065	5.19%
Kt	-100.0	-0.0898	mg/L	0.00838	-0.0898	mg/L	0.00838	9.33%
Mgt	2.6	0.00080	mg/L	0.000824	0.00080	mg/L	0.000824	103.49%
Mnt	20.8	0.00004	mg/L	0.000001	0.00004	mg/L	0.000001	1.37%
Mot	-9.1	-0.00084	mg/L	0.000293	-0.00084	mg/L	0.000293	35.00%
Nat	154.3	0.0703	mg/L	0.02740	0.0703	mg/L	0.02740	38.95%
Nit	-0.0	0.00000	mg/L	0.000290	0.00000	mg/L	0.000290	>999.9%
Pbt	4.0	0.00089	mg/L	0.000753	0.00089	mg/L	0.000753	84.47%
Sbt	5.4	0.00296	mg/L	0.001991	0.00296	mg/L	0.001991	67.32%
Set	12.5	0.0104	mg/L	0.00019	0.0104	mg/L	0.00019	1.85%
Tlt	-0.8	-0.00033	mg/L	0.002493	-0.00033	mg/L	0.002493	758.63%
Vt	-13.7	-0.00009	mg/L	0.000215	-0.00009	mg/L	0.000215	246.63%
Znt	23.7	0.00053	mg/L	0.000019	0.00053	mg/L	0.000019	3.61%
Alxt	-132.0	-1.66	ug/L	1.575	-0.00166	mg/L	0.001575	94.84%
Bext	12.2	0.00428	ug/L	0.011588	0.00000	mg/L	0.000012	270.87%

Sequence No.: 82
Sample ID: LCS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 93
Date Collected: 7/13/2007 03:55:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LCS

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: LCS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	431974.4	104	%	1.4				1.39%
Yr	168021.6	97.6	%	0.41				0.42%
Agt	121273.1	0.476	mg/L	0.0002	0.476	mg/L	0.0002	0.04%
Alt	5892.1	1.88	mg/L	0.043	1.88	mg/L	0.043	2.28%
Ast	1905.1	1.02	mg/L	0.020	1.02	mg/L	0.020	1.95%
B_t	14685.3	0.482	mg/L	0.0034	0.482	mg/L	0.0034	0.71%
Bat	65521.0	0.982	mg/L	0.0002	0.982	mg/L	0.0002	0.02%
Bet	141510.6	0.0496	mg/L	0.00022	0.0496	mg/L	0.00022	0.44%
Cat	299399.8	50.6	mg/L	0.03	50.6	mg/L	0.03	0.07%
Cdt	5117.1	0.195	mg/L	0.0030	0.195	mg/L	0.0030	1.55%
Cot	24378.2	1.01	mg/L	0.019	1.01	mg/L	0.019	1.83%
Crt	72834.1	0.978	mg/L	0.0010	0.978	mg/L	0.0010	0.10%
Cut	322278.9	0.959	mg/L	0.0089	0.959	mg/L	0.0089	0.93%
Fet	4736.3	4.91	mg/L	0.041	4.91	mg/L	0.041	0.84%
Kt	22709.8	20.4	mg/L	0.19	20.4	mg/L	0.19	0.95%
Mgt	67891.3	20.9	mg/L	0.03	20.9	mg/L	0.03	0.15%
Mnt	272707.6	0.505	mg/L	0.0005	0.505	mg/L	0.0005	0.10%
Mot	10659.6	0.977	mg/L	0.0158	0.977	mg/L	0.0158	1.61%
Nat	106117.0	48.4	mg/L	0.40	48.4	mg/L	0.40	0.83%
Nit	10671.1	0.506	mg/L	0.0091	0.506	mg/L	0.0091	1.80%
Pbt	4829.4	1.07	mg/L	0.017	1.07	mg/L	0.017	1.60%
Sbt	880.3	0.472	mg/L	0.0096	0.472	mg/L	0.0096	2.04%
Set	1259.2	1.06	mg/L	0.023	1.06	mg/L	0.023	2.15%
Tlt	2850.9	1.11	mg/L	0.017	1.11	mg/L	0.017	1.53%
Vt	152377.9	0.982	mg/L	0.0009	0.982	mg/L	0.0009	0.09%
Znt	47492.6	1.06	mg/L	0.006	1.06	mg/L	0.006	0.52%
Alxt	143745.9	1810	ug/L	12.2	1.81	mg/L	0.012	0.67%
Bext	141510.6	49.6	ug/L	0.22	0.0496	mg/L	0.00022	0.44%

Sequence No.: 83
Sample ID: LCSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 94
Date Collected: 7/13/2007 04:00:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LCSD

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: LCSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	431525.9	103	%	0.1				0.12%
Yr	170805.7	99.2	%	0.67				0.68%
Agt	119989.7	0.471	mg/L	0.0049	0.471	mg/L	0.0049	1.04%
Alt	5821.6	1.85	mg/L	0.025	1.85	mg/L	0.025	1.35%
Ast	1899.6	1.02	mg/L	0.005	1.02	mg/L	0.005	0.53%
B_t	14570.4	0.478	mg/L	0.0047	0.478	mg/L	0.0047	0.99%
Bat	65300.6	0.979	mg/L	0.0059	0.979	mg/L	0.0059	0.60%
Bet	140741.7	0.0494	mg/L	0.00036	0.0494	mg/L	0.00036	0.73%
Cat	296049.6	50.1	mg/L	0.27	50.1	mg/L	0.27	0.55%
Cdt	5095.6	0.195	mg/L	0.0004	0.195	mg/L	0.0004	0.18%
Cot	24235.8	1.01	mg/L	0.000	1.01	mg/L	0.000	0.02%
Crt	72285.1	0.970	mg/L	0.0064	0.970	mg/L	0.0064	0.66%
Cut	321502.8	0.957	mg/L	0.0025	0.957	mg/L	0.0025	0.26%
Fet	4633.2	4.81	mg/L	0.071	4.81	mg/L	0.071	1.47%
Kt	22411.8	20.1	mg/L	0.36	20.1	mg/L	0.36	1.78%
Mgt	66654.7	20.6	mg/L	0.22	20.6	mg/L	0.22	1.06%
Mnt	271008.5	0.502	mg/L	0.0030	0.502	mg/L	0.0030	0.59%
Mot	10608.6	0.973	mg/L	0.0011	0.973	mg/L	0.0011	0.12%
Nat	107033.1	48.8	mg/L	0.21	48.8	mg/L	0.21	0.43%
Nit	10595.5	0.502	mg/L	0.0005	0.502	mg/L	0.0005	0.09%
Pbt	4799.3	1.06	mg/L	0.000	1.06	mg/L	0.000	0.01%
Sbt	874.0	0.468	mg/L	0.0073	0.468	mg/L	0.0073	1.55%
Set	1259.2	1.06	mg/L	0.003	1.06	mg/L	0.003	0.25%
Tlt	2848.1	1.10	mg/L	0.006	1.10	mg/L	0.006	0.50%
Vt	151694.3	0.978	mg/L	0.0054	0.978	mg/L	0.0054	0.56%
Znt	47148.3	1.05	mg/L	0.006	1.05	mg/L	0.006	0.52%
Alxt	144741.0	1820	ug/L	10.5	1.82	mg/L	0.011	0.58%
Bext	140741.7	49.4	ug/L	0.36	0.0494	mg/L	0.00036	0.73%

Sequence No.: 85
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 7/13/2007 04:08:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	421439.2	101	%	0.4				0.44%
Yr	164005.2	95.3	%	1.76				1.84%
Agt	215378.1	0.846	mg/L	0.0013	0.846	mg/L	0.0013	0.16%
QC value within limits for Ag		Recovery = 84.56%						
Alt	14837.0	4.73	mg/L	0.079	4.73	mg/L	0.079	1.67%
QC value within limits for Al		Recovery = 94.52%						
Ast	8700.0	4.67	mg/L	0.030	4.67	mg/L	0.030	0.64%
QC value within limits for As		Recovery = 93.35%						
B_t	73454.8	2.41	mg/L	0.008	2.41	mg/L	0.008	0.32%
QC value within limits for B_		Recovery = 96.36%						
Bat	324768.2	4.87	mg/L	0.000	4.87	mg/L	0.000	0.01%
QC value within limits for Ba		Recovery = 97.39%						
Bet	5570537.1	1.95	mg/L	0.008	1.95	mg/L	0.008	0.39%
QC value within limits for Be		Recovery = 97.70%						
Cat	296491.5	50.1	mg/L	0.01	50.1	mg/L	0.01	0.01%
QC value within limits for Ca		Recovery = 100.27%						
Cdt	59883.2	2.39	mg/L	0.002	2.39	mg/L	0.002	0.09%
QC value within limits for Cd		Recovery = 95.45%						
Cot	118862.8	4.94	mg/L	0.008	4.94	mg/L	0.008	0.16%
QC value within limits for Co		Recovery = 98.83%						
Crt	361573.9	4.85	mg/L	0.011	4.85	mg/L	0.011	0.24%
QC value within limits for Cr		Recovery = 97.09%						
Cut	1607940.0	4.79	mg/L	0.021	4.79	mg/L	0.021	0.44%
QC value within limits for Cu		Recovery = 95.70%						
Fet	4726.9	4.90	mg/L	0.089	4.90	mg/L	0.089	1.82%
QC value within limits for Fe		Recovery = 98.07%						
Kt	54983.3	49.4	mg/L	0.31	49.4	mg/L	0.31	0.62%
QC value within limits for K		Recovery = 98.80%						
Mgt	165164.4	50.9	mg/L	0.17	50.9	mg/L	0.17	0.33%
QC value within limits for Mg		Recovery = 101.85%						
Mnt	2678034.8	4.96	mg/L	0.000	4.96	mg/L	0.000	0.01%
QC value within limits for Mn		Recovery = 99.17%						
Mot	52589.3	4.82	mg/L	0.011	4.82	mg/L	0.011	0.23%
QC value within limits for Mo		Recovery = 96.45%						
Nat	103984.6	47.4	mg/L	0.14	47.4	mg/L	0.14	0.29%
QC value within limits for Na		Recovery = 94.83%						
Nit	105019.7	4.98	mg/L	0.010	4.98	mg/L	0.010	0.20%
QC value within limits for Ni		Recovery = 99.53%						
Pbt	22182.9	4.90	mg/L	0.028	4.90	mg/L	0.028	0.56%
QC value within limits for Pb		Recovery = 98.06%						
Sbt	8547.1	4.65	mg/L	0.035	4.65	mg/L	0.035	0.75%
QC value within limits for Sb		Recovery = 93.04%						
Set	5784.2	4.81	mg/L	0.030	4.81	mg/L	0.030	0.63%
QC value within limits for Se		Recovery = 96.29%						
Tlt	12937.7	5.02	mg/L	0.029	5.02	mg/L	0.029	0.59%
QC value within limits for Tl		Recovery = 100.35%						
Vt	756096.9	4.88	mg/L	0.001	4.88	mg/L	0.001	0.02%
QC value within limits for V		Recovery = 97.50%						
Znt	221986.1	4.95	mg/L	0.002	4.95	mg/L	0.002	0.04%
QC value within limits for Zn		Recovery = 98.95%						
Alxt	360629.3	4540	ug/L	15.9	4.54	mg/L	0.016	0.35%
QC value within limits for Alx		Recovery = 90.75%						
Bext	5570537.1	1950	ug/L	7.7	1.95	mg/L	0.008	0.39%
QC value within limits for Bex		Recovery = 97.70%						

All analyte(s) passed QC.

Sequence No.: 86
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 7/13/2007 04:12:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	425403.2	102	%	1.5				1.48%
Yr	168529.0	97.9	%	0.89				0.91%
Agt	-49.4	-0.00019	mg/L	0.000051	-0.00019	mg/L	0.000051	26.19%
QC value within limits for Ag	Recovery = Not calculated							
Alt	21.8	0.00693	mg/L	0.002382	0.00693	mg/L	0.002382	34.38%
QC value within limits for Al	Recovery = Not calculated							
Ast	26.8	0.0144	mg/L	0.00311	0.0144	mg/L	0.00311	21.61%
QC value within limits for As	Recovery = Not calculated							
B_t	181.5	0.00598	mg/L	0.001123	0.00598	mg/L	0.001123	18.78%
QC value within limits for B_	Recovery = Not calculated							
Bat	-0.7	-0.00001	mg/L	0.000096	-0.00001	mg/L	0.000096	896.98%
QC value within limits for Ba	Recovery = Not calculated							
Bet	-1.1	0.00000	mg/L	0.000015	0.00000	mg/L	0.000015	>999.9%
QC value within limits for Be	Recovery = Not calculated							
Cat	-21.4	-0.00362	mg/L	0.000948	-0.00362	mg/L	0.000948	26.19%
QC value within limits for Ca	Recovery = Not calculated							
Cdt	8.6	0.00010	mg/L	0.000073	0.00010	mg/L	0.000073	71.29%
QC value within limits for Cd	Recovery = Not calculated							
Cot	2.4	0.00010	mg/L	0.000241	0.00010	mg/L	0.000241	246.86%
QC value within limits for Co	Recovery = Not calculated							
Crt	3.0	0.00004	mg/L	0.000286	0.00004	mg/L	0.000286	719.42%
QC value within limits for Cr	Recovery = Not calculated							
Cut	-30.8	-0.00009	mg/L	0.000044	-0.00009	mg/L	0.000044	47.97%
QC value within limits for Cu	Recovery = Not calculated							
Fet	5.6	0.00584	mg/L	0.002175	0.00584	mg/L	0.002175	37.25%
QC value within limits for Fe	Recovery = Not calculated							
Kt	4.4	0.00399	mg/L	0.048925	0.00399	mg/L	0.048925	>999.9%
QC value within limits for K	Recovery = Not calculated							
Mgt	-4.4	-0.00137	mg/L	0.000392	-0.00137	mg/L	0.000392	28.56%
QC value within limits for Mg	Recovery = Not calculated							
Mnt	24.0	0.00004	mg/L	0.000017	0.00004	mg/L	0.000017	38.99%
QC value within limits for Mn	Recovery = Not calculated							
Mot	-2.6	-0.00024	mg/L	0.000365	-0.00024	mg/L	0.000365	151.31%
QC value within limits for Mo	Recovery = Not calculated							
Nat	68.6	0.0313	mg/L	0.00645	0.0313	mg/L	0.00645	20.60%
QC value within limits for Na	Recovery = Not calculated							
Nit	2.0	0.00010	mg/L	0.000156	0.00010	mg/L	0.000156	160.90%
QC value within limits for Ni	Recovery = Not calculated							
Pbt	3.2	0.00070	mg/L	0.000620	0.00070	mg/L	0.000620	88.80%
QC value within limits for Pb	Recovery = Not calculated							
Sbt	16.2	0.00895	mg/L	0.005905	0.00895	mg/L	0.005905	65.99%
QC value within limits for Sb	Recovery = Not calculated							
Set	3.4	0.00284	mg/L	0.004728	0.00284	mg/L	0.004728	166.70%
QC value within limits for Se	Recovery = Not calculated							
Tlt	1.1	0.00042	mg/L	0.000105	0.00042	mg/L	0.000105	25.18%
QC value within limits for Tl	Recovery = Not calculated							
Vt	-18.8	-0.00012	mg/L	0.000155	-0.00012	mg/L	0.000155	129.15%
QC value within limits for V	Recovery = Not calculated							
Znt	0.8	0.00002	mg/L	0.000080	0.00002	mg/L	0.000080	469.28%
QC value within limits for Zn	Recovery = Not calculated							
Alxt	-64.7	-0.815	ug/L	1.0774	-0.00081	mg/L	0.001077	132.27%
QC value within limits for Alx	Recovery = Not calculated							
Bext	-1.1	-0.00038	ug/L	0.015178	0.00000	mg/L	0.000015	>999.9%
QC value within limits for Bex	Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 87
Sample ID: MCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 7/13/2007 04:15:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MCV

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: MCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	427502.3	102	%	1.1				1.09%
Yr	166267.8	96.6	%	0.10				0.10%
Agt	118254.9	0.464	mg/L	0.0003	0.464	mg/L	0.0003	0.07%
QC value within limits for Ag		Recovery = 92.86%						
Alt	7404.5	2.36	mg/L	0.001	2.36	mg/L	0.001	0.02%
QC value within limits for Al		Recovery = 94.34%						
Ast	4361.7	2.34	mg/L	0.022	2.34	mg/L	0.022	0.95%
QC value within limits for As		Recovery = 93.60%						
B_t	36784.2	1.21	mg/L	0.003	1.21	mg/L	0.003	0.22%
QC value within limits for B_		Recovery = 96.50%						
Bat	165424.7	2.48	mg/L	0.003	2.48	mg/L	0.003	0.13%
QC value within limits for Ba		Recovery = 99.21%						
Bet	2801167.4	0.983	mg/L	0.0108	0.983	mg/L	0.0108	1.10%
QC value within limits for Be		Recovery = 98.26%						
Cat	148851.4	25.2	mg/L	0.01	25.2	mg/L	0.01	0.02%
QC value within limits for Ca		Recovery = 100.68%						
Cdt	29924.4	1.19	mg/L	0.013	1.19	mg/L	0.013	1.07%
QC value within limits for Cd		Recovery = 95.40%						
Cot	60416.2	2.51	mg/L	0.003	2.51	mg/L	0.003	0.10%
QC value within limits for Co		Recovery = 100.46%						
Crt	181937.7	2.44	mg/L	0.005	2.44	mg/L	0.005	0.21%
QC value within limits for Cr		Recovery = 97.71%						
Cut	814733.5	2.42	mg/L	0.031	2.42	mg/L	0.031	1.28%
QC value within limits for Cu		Recovery = 96.99%						
Fet	2369.0	2.46	mg/L	0.003	2.46	mg/L	0.003	0.11%
QC value within limits for Fe		Recovery = 98.30%						
Kt	27148.4	24.4	mg/L	0.12	24.4	mg/L	0.12	0.50%
QC value within limits for K		Recovery = 97.56%						
Mgt	83489.8	25.7	mg/L	0.05	25.7	mg/L	0.05	0.21%
QC value within limits for Mg		Recovery = 102.97%						
Mnt	1359608.7	2.52	mg/L	0.022	2.52	mg/L	0.022	0.88%
QC value within limits for Mn		Recovery = 100.69%						
Mot	26455.0	2.43	mg/L	0.027	2.43	mg/L	0.027	1.10%
QC value within limits for Mo		Recovery = 97.04%						
Nat	51636.2	23.5	mg/L	0.41	23.5	mg/L	0.41	1.74%
QC value within limits for Na		Recovery = 94.18%						
Nit	53310.7	2.53	mg/L	0.007	2.53	mg/L	0.007	0.29%
QC value within limits for Ni		Recovery = 101.04%						
Pbt	11241.7	2.48	mg/L	0.030	2.48	mg/L	0.030	1.21%
QC value within limits for Pb		Recovery = 99.39%						
Sbt	4367.3	2.38	mg/L	0.025	2.38	mg/L	0.025	1.03%
QC value within limits for Sb		Recovery = 95.10%						
Set	2894.1	2.41	mg/L	0.023	2.41	mg/L	0.023	0.97%
QC value within limits for Se		Recovery = 96.36%						
Tlt	6658.1	2.58	mg/L	0.024	2.58	mg/L	0.024	0.92%
QC value within limits for Tl		Recovery = 103.28%						
Vt	377911.4	2.44	mg/L	0.007	2.44	mg/L	0.007	0.28%
QC value within limits for V		Recovery = 97.47%						
Znt	112138.2	2.50	mg/L	0.005	2.50	mg/L	0.005	0.19%
QC value within limits for Zn		Recovery = 99.96%						
Alxt	181054.4	2280	ug/L	3.6	2.28	mg/L	0.004	0.16%
QC value within limits for Alx		Recovery = 91.12%						
Bext	2801167.4	983	ug/L	10.8	0.983	mg/L	0.0108	1.10%
QC value within limits for Bex		Recovery = 98.26%						

All analyte(s) passed QC.

Sequence No.: 88
Sample ID: 2707090217MS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 96
Date Collected: 7/13/2007 04:20:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2707090217MS

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2707090217MS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	411823.4	98.7	%	0.14				0.14%
Yr	163203.6	94.8	%	0.43				0.45%
Agt	109921.8	0.432	mg/L	0.0057	0.432	mg/L	0.0057	1.33%
Alt	5978.4	1.90	mg/L	0.030	1.90	mg/L	0.030	1.56%
Ast	1970.2	1.06	mg/L	0.007	1.06	mg/L	0.007	0.70%
B_t	28037.9	0.921	mg/L	0.0057	0.921	mg/L	0.0057	0.62%
Bat	71756.0	1.08	mg/L	0.002	1.08	mg/L	0.002	0.17%
Bet	143470.0	0.0503	mg/L	0.00011	0.0503	mg/L	0.00011	0.22%
Cat	645416.7	109	mg/L	0.0	109	mg/L	0.0	0.02%
Cdt	5173.5	0.197	mg/L	0.0012	0.197	mg/L	0.0012	0.59%
Cot	24355.8	1.01	mg/L	0.006	1.01	mg/L	0.006	0.60%
Crt	73404.4	0.986	mg/L	0.0008	0.986	mg/L	0.0008	0.08%
Cut	328586.3	0.978	mg/L	0.0032	0.978	mg/L	0.0032	0.33%
Fet	4743.1	4.92	mg/L	0.001	4.92	mg/L	0.001	0.01%
Kt	29960.7	26.9	mg/L	0.18	26.9	mg/L	0.18	0.66%
Mgt	153600.2	47.4	mg/L	0.04	47.4	mg/L	0.04	0.09%
Mnt	786748.7	1.46	mg/L	0.003	1.46	mg/L	0.003	0.19%
Mot	10854.6	0.995	mg/L	0.0047	0.995	mg/L	0.0047	0.47%
Nat	469503.1	214	mg/L	0.5	214	mg/L	0.5	0.25%
Nit	10684.6	0.506	mg/L	0.0021	0.506	mg/L	0.0021	0.42%
Pbt	4741.8	1.05	mg/L	0.005	1.05	mg/L	0.005	0.45%
Sbt	917.6	0.492	mg/L	0.0013	0.492	mg/L	0.0013	0.27%
Set	1228.6	1.03	mg/L	0.003	1.03	mg/L	0.003	0.30%
Tlt	2734.8	1.06	mg/L	0.005	1.06	mg/L	0.005	0.46%
Vt	155309.1	1.00	mg/L	0.001	1.00	mg/L	0.001	0.14%
Znt	48158.5	1.08	mg/L	0.004	1.08	mg/L	0.004	0.33%
Alxt	148469.4	1870	ug/L	8.4	1.87	mg/L	0.008	0.45%
Bext	143470.0	50.3	ug/L	0.11	0.0503	mg/L	0.00011	0.22%

Sequence No.: 89
Sample ID: 2707090217MSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 97
Date Collected: 7/13/2007 04:24:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2707090217MSD

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2707090217MSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	419307.5	101	%	0.8				0.83%
Yr	163357.5	94.9	%	1.07				1.13%
Agt	108412.6	0.426	mg/L	0.0004	0.426	mg/L	0.0004	0.08%
Alt	5921.0	1.89	mg/L	0.069	1.89	mg/L	0.069	3.63%
Ast	1948.7	1.05	mg/L	0.000	1.05	mg/L	0.000	0.03%
B_t	28106.4	0.924	mg/L	0.0021	0.924	mg/L	0.0021	0.23%
Bat	71235.9	1.07	mg/L	0.007	1.07	mg/L	0.007	0.65%
Bet	142257.4	0.0499	mg/L	0.00004	0.0499	mg/L	0.00004	0.07%
Cat	644266.8	109	mg/L	0.1	109	mg/L	0.1	0.09%
Cdt	5116.0	0.195	mg/L	0.0006	0.195	mg/L	0.0006	0.31%
Cot	24050.1	1.000	mg/L	0.0033	1.000	mg/L	0.0033	0.33%
Crt	73205.3	0.983	mg/L	0.0038	0.983	mg/L	0.0038	0.38%
Cut	326680.2	0.972	mg/L	0.0012	0.972	mg/L	0.0012	0.12%
Fet	4791.0	4.97	mg/L	0.116	4.97	mg/L	0.116	2.34%
Kt	29740.2	26.7	mg/L	0.88	26.7	mg/L	0.88	3.28%
Mgt	153230.8	47.2	mg/L	0.09	47.2	mg/L	0.09	0.20%
Mnt	781032.8	1.45	mg/L	0.007	1.45	mg/L	0.007	0.46%
Mot	10729.5	0.984	mg/L	0.0047	0.984	mg/L	0.0047	0.48%
Nat	463497.7	211	mg/L	1.4	211	mg/L	1.4	0.68%
Nit	10568.7	0.501	mg/L	0.0014	0.501	mg/L	0.0014	0.27%
Pbt	4681.2	1.03	mg/L	0.006	1.03	mg/L	0.006	0.59%
Sbt	898.2	0.481	mg/L	0.0031	0.481	mg/L	0.0031	0.65%
Set	1213.1	1.02	mg/L	0.006	1.02	mg/L	0.006	0.63%
Tlt	2698.7	1.05	mg/L	0.004	1.05	mg/L	0.004	0.38%
Vt	154494.9	0.996	mg/L	0.0015	0.996	mg/L	0.0015	0.15%
Znt	47967.2	1.07	mg/L	0.003	1.07	mg/L	0.003	0.26%
Alxt	147438.8	1860	ug/L	7.6	1.86	mg/L	0.008	0.41%
Bext	142257.4	49.9	ug/L	0.04	0.0499	mg/L	0.00004	0.07%

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

Autosampler Location: 10
Date Collected: 7/13/2007 04:42:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	217.0 kPa	0.65 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	395459.4	94.8	%	0.94				0.99%
Yr	159781.1	92.8	%	0.92				0.99%
Agt	-9696.8	-0.0381	mg/L	0.00018	-0.0381	mg/L	0.00018	0.46%
QC value within limits for Ag		Recovery = Not calculated						
Alt	716133.2	228	mg/L	3.2	228	mg/L	3.2	1.42%
QC value within limits for Al		Recovery = 91.24%						
Ast	-437.9	-0.177	mg/L	0.0061	-0.177	mg/L	0.0061	3.47%
QC value within limits for As		Recovery = Not calculated						
B_t	2006.1	0.0661	mg/L	0.00105	0.0661	mg/L	0.00105	1.59%
QC value within limits for B_		Recovery = Not calculated						
Bat	139.3	0.00209	mg/L	0.000042	0.00209	mg/L	0.000042	2.03%
QC value within limits for Ba		Recovery = Not calculated						
Bet	-631.2	-0.00022	mg/L	0.000013	-0.00022	mg/L	0.000013	5.69%
QC value within limits for Be		Recovery = Not calculated						
Cat	1457188.5	246	mg/L	3.0	246	mg/L	3.0	1.22%
QC value within limits for Ca		Recovery = 98.56%						
Cdt	-42.1	0.00237	mg/L	0.000206	0.00237	mg/L	0.000206	8.67%
QC value within limits for Cd		Recovery = Not calculated						
Cot	37.5	0.00156	mg/L	0.000444	0.00156	mg/L	0.000444	28.48%
QC value within limits for Co		Recovery = Not calculated						
Crt	-51.5	-0.00069	mg/L	0.000216	-0.00069	mg/L	0.000216	31.20%
QC value within limits for Cr		Recovery = Not calculated						
Cut	-4343.6	-0.0129	mg/L	0.00016	-0.0129	mg/L	0.00016	1.24%
QC value within limits for Cu		Recovery = Not calculated						
Fet	91822.9	95.3	mg/L	0.46	95.3	mg/L	0.46	0.49%
QC value within limits for Fe		Recovery = 95.26%						
Kt	127.3	0.114	mg/L	0.0454	0.114	mg/L	0.0454	39.67%
QC value within limits for K		Recovery = Not calculated						
Mgt	771652.5	238	mg/L	3.3	238	mg/L	3.3	1.37%
QC value within limits for Mg		Recovery = 95.17%						
Mnt	1166.6	0.00216	mg/L	0.000023	0.00216	mg/L	0.000023	1.06%
QC value within limits for Mn		Recovery = Not calculated						
Mot	-28.5	-0.00261	mg/L	0.000223	-0.00261	mg/L	0.000223	8.54%
QC value within limits for Mo		Recovery = Not calculated						
Nat	1592.4	0.726	mg/L	0.0129	0.726	mg/L	0.0129	1.78%
QC value within limits for Na		Recovery = Not calculated						
Nit	-14.8	-0.00070	mg/L	0.000040	-0.00070	mg/L	0.000040	5.64%
QC value within limits for Ni		Recovery = Not calculated						
Pbt	-170.4	-0.0377	mg/L	0.00458	-0.0377	mg/L	0.00458	12.17%
QC value within limits for Pb		Recovery = Not calculated						
Sbt	18.3	0.0101	mg/L	0.00203	0.0101	mg/L	0.00203	20.08%
QC value within limits for Sb		Recovery = Not calculated						
Set	-327.4	-0.0866	mg/L	0.00144	-0.0866	mg/L	0.00144	1.66%
QC value within limits for Se		Recovery = Not calculated						
Tlt	40.1	0.0155	mg/L	0.00501	0.0155	mg/L	0.00501	32.34%
QC value within limits for Tl		Recovery = Not calculated						
Vt	-282.3	-0.00181	mg/L	0.000203	-0.00181	mg/L	0.000203	11.21%
QC value within limits for V		Recovery = Not calculated						
Znt	665.9	0.0149	mg/L	0.00000	0.0149	mg/L	0.00000	0.03%
QC value within limits for Zn		Recovery = Not calculated						
Alxt	Saturated2							
Unable to evaluate QC.								
Bext	-631.2	-0.221	ug/L	0.0126	-0.00022	mg/L	0.000013	5.69%
QC value within limits for Bex		Recovery = Not calculated						

All analyte(s) passed QC. One or more analytes were not evaluated.

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

Autosampler Location: 11
Date Collected: 7/13/2007 04:46:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	396747.8	95.1	%	0.08				0.08%
Yr	158306.3	92.0	%	1.80				1.95%
Agt	-493.3	-0.00194	mg/L	0.000810	-0.00194	mg/L	0.000810	41.83%
QC value less than the lower limit for Ag Recovery = -0.39%								
Alt	728610.7	232	mg/L	4.3	232	mg/L	4.3	1.87%
QC value within limits for Al Recovery = 92.83%								
Ast	-429.4	-0.173	mg/L	0.0036	-0.173	mg/L	0.0036	2.05%
QC value less than the lower limit for As Recovery = Not calculated								
B_t	1892.6	0.0619	mg/L	0.00046	0.0619	mg/L	0.00046	0.74%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Bat	16711.5	0.251	mg/L	0.0006	0.251	mg/L	0.0006	0.24%
QC value within limits for Ba Recovery = 100.23%								
Bet	683195.9	0.240	mg/L	0.0013	0.240	mg/L	0.0013	0.56%
QC value within limits for Be Recovery = 95.86%								
Cat	1471466.7	249	mg/L	5.7	249	mg/L	5.7	2.30%
QC value within limits for Ca Recovery = 99.53%								
Cdt	11953.0	0.494	mg/L	0.0017	0.494	mg/L	0.0017	0.33%
QC value within limits for Cd Recovery = 98.72%								
Cot	5652.9	0.235	mg/L	0.0007	0.235	mg/L	0.0007	0.28%
QC value within limits for Co Recovery = 94.00%								
Crt	17979.7	0.241	mg/L	0.0003	0.241	mg/L	0.0003	0.13%
QC value within limits for Cr Recovery = 96.56%								
Cut	79788.5	0.237	mg/L	0.0014	0.237	mg/L	0.0014	0.59%
QC value within limits for Cu Recovery = 94.98%								
Fet	91816.9	95.2	mg/L	0.37	95.2	mg/L	0.37	0.38%
QC value within limits for Fe Recovery = 95.25%								
Kt	-45.0	-0.0404	mg/L	0.00779	-0.0404	mg/L	0.00779	19.29%
QC value within limits for K Recovery = Not calculated								
Mgt	780974.6	241	mg/L	5.5	241	mg/L	5.5	2.27%
QC value within limits for Mg Recovery = 96.32%								
Mnt	135948.2	0.252	mg/L	0.0009	0.252	mg/L	0.0009	0.34%
QC value within limits for Mn Recovery = 100.68%								
Mot	-27.6	-0.00253	mg/L	0.000728	-0.00253	mg/L	0.000728	28.74%
QC value within limits for Mo Recovery = Not calculated								
Nat	657.2	0.300	mg/L	0.0128	0.300	mg/L	0.0128	4.28%
QC value within limits for Na Recovery = Not calculated								
Nit	9621.8	0.456	mg/L	0.0007	0.456	mg/L	0.0007	0.15%
QC value within limits for Ni Recovery = 91.18%								
Pbt	2016.7	0.446	mg/L	0.0044	0.446	mg/L	0.0044	0.98%
QC value within limits for Pb Recovery = 89.15%								
Sbt	18.7	0.00653	mg/L	0.001796	0.00653	mg/L	0.001796	27.48%
QC value within limits for Sb Recovery = Not calculated								
Set	-337.4	-0.0949	mg/L	0.00476	-0.0949	mg/L	0.00476	5.02%
QC value within limits for Se Recovery = Not calculated								
Tlt	30.1	0.0123	mg/L	0.00084	0.0123	mg/L	0.00084	6.83%
QC value within limits for Tl Recovery = Not calculated								
Vt	37497.1	0.242	mg/L	0.0006	0.242	mg/L	0.0006	0.23%
QC value within limits for V Recovery = 96.71%								
Znt	23161.2	0.517	mg/L	0.0005	0.517	mg/L	0.0005	0.11%
QC value within limits for Zn Recovery = 103.32%								
Alxt	Saturated2							
Unable to evaluate QC.								
Bext	683195.9	240	ug/L	1.3	0.240	mg/L	0.0013	0.56%
QC value within limits for Bex Recovery = 95.86%								

QC Failed. Continue with analysis.

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

Autosampler Location: 0
Date Collected: 7/13/2007 04:50:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Wash

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: Wash

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	427153.6	102	%	0.4				0.35%
Yr	167569.6	97.4	%	1.35				1.38%
Ag†	-42.2	-0.00017	mg/L	0.000380	-0.00017	mg/L	0.000380	229.53%
QC value within limits for Ag		Recovery = Not calculated						
Al†	37.5	0.0119	mg/L	0.00333	0.0119	mg/L	0.00333	27.87%
QC value within limits for Al		Recovery = Not calculated						
As†	-4.8	-0.00256	mg/L	0.000009	-0.00256	mg/L	0.000009	0.34%
QC value within limits for As		Recovery = Not calculated						
B_†	-28.6	-0.00094	mg/L	0.000104	-0.00094	mg/L	0.000104	11.09%
QC value within limits for B_		Recovery = Not calculated						
Ba†	6.2	0.00009	mg/L	0.000094	0.00009	mg/L	0.000094	101.56%
QC value within limits for Ba		Recovery = Not calculated						
Be†	92.1	0.00003	mg/L	0.000002	0.00003	mg/L	0.000002	5.43%
QC value within limits for Be		Recovery = Not calculated						
Ca†	-9.9	-0.00167	mg/L	0.002648	-0.00167	mg/L	0.002648	158.17%
QC value within limits for Ca		Recovery = Not calculated						
Cd†	-3.1	-0.00008	mg/L	0.000015	-0.00008	mg/L	0.000015	18.51%
QC value within limits for Cd		Recovery = Not calculated						
Co†	2.5	0.00011	mg/L	0.000060	0.00011	mg/L	0.000060	56.63%
QC value within limits for Co		Recovery = Not calculated						
Cr†	-5.8	-0.00008	mg/L	0.000013	-0.00008	mg/L	0.000013	16.64%
QC value within limits for Cr		Recovery = Not calculated						
Cu†	-77.1	-0.00023	mg/L	0.000030	-0.00023	mg/L	0.000030	13.16%
QC value within limits for Cu		Recovery = Not calculated						
Fe†	3.7	0.00386	mg/L	0.001618	0.00386	mg/L	0.001618	41.96%
QC value within limits for Fe		Recovery = Not calculated						
K†	-28.9	-0.0259	mg/L	0.03487	-0.0259	mg/L	0.03487	134.38%
QC value within limits for K		Recovery = Not calculated						
Mg†	-1.0	-0.00032	mg/L	0.000770	-0.00032	mg/L	0.000770	241.93%
QC value within limits for Mg		Recovery = Not calculated						
Mn†	-10.6	-0.00002	mg/L	0.000006	-0.00002	mg/L	0.000006	29.36%
QC value within limits for Mn		Recovery = Not calculated						
Mo†	-3.7	-0.00034	mg/L	0.000369	-0.00034	mg/L	0.000369	109.81%
QC value within limits for Mo		Recovery = Not calculated						
Na†	129.3	0.0590	mg/L	0.00501	0.0590	mg/L	0.00501	8.49%
QC value within limits for Na		Recovery = Not calculated						
Ni†	0.1	0.00000	mg/L	0.000282	0.00000	mg/L	0.000282	>999.9%
QC value within limits for Ni		Recovery = Not calculated						
Pb†	2.7	0.00060	mg/L	0.000527	0.00060	mg/L	0.000527	87.53%
QC value within limits for Pb		Recovery = Not calculated						
Sb†	1.0	0.00057	mg/L	0.002695	0.00057	mg/L	0.002695	469.38%
QC value within limits for Sb		Recovery = Not calculated						
Se†	1.7	0.00138	mg/L	0.002087	0.00138	mg/L	0.002087	151.04%
QC value within limits for Se		Recovery = Not calculated						
Tl†	4.2	0.00161	mg/L	0.004930	0.00161	mg/L	0.004930	306.31%
QC value within limits for Tl		Recovery = Not calculated						
V†	-25.8	-0.00017	mg/L	0.000095	-0.00017	mg/L	0.000095	57.27%
QC value within limits for V		Recovery = Not calculated						
Zn†	-2.8	-0.00006	mg/L	0.000005	-0.00006	mg/L	0.000005	8.19%
QC value within limits for Zn		Recovery = Not calculated						
Alx†	14.8	0.187	ug/L	0.3203	0.00019	mg/L	0.000320	171.63%
QC value within limits for Alx		Recovery = Not calculated						
Bex†	92.1	0.0323	ug/L	0.00175	0.00003	mg/L	0.000002	5.43%
QC value within limits for Bex		Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 96
Sample ID: QC-25 1ppm
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 7/13/2007 04:53:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: QC-25 1ppm

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: QC-25 1ppm

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	440753.6	106	%	0.9				0.89%
Yr	170646.3	99.2	%	0.91				0.92%
Agt	292942.7	1.15	mg/L	0.004	1.15	mg/L	0.004	0.31%
QC value greater than the upper limit for Ag Recovery = 115.01%								
Alt	3004.1	0.957	mg/L	0.0102	0.957	mg/L	0.0102	1.06%
QC value within limits for Al Recovery = 95.69%								
Ast	1758.4	0.943	mg/L	0.0023	0.943	mg/L	0.0023	0.24%
QC value within limits for As Recovery = 94.33%								
B_t	27711.0	0.910	mg/L	0.0045	0.910	mg/L	0.0045	0.49%
QC value within limits for B_ Recovery = 91.05%								
Bat	68453.4	1.03	mg/L	0.004	1.03	mg/L	0.004	0.40%
QC value within limits for Ba Recovery = 102.64%								
Bet	2643844.0	0.927	mg/L	0.0005	0.927	mg/L	0.0005	0.05%
QC value within limits for Be Recovery = 92.74%								
Cat	5872.7	0.993	mg/L	0.0077	0.993	mg/L	0.0077	0.78%
QC value within limits for Ca Recovery = 99.31%								
Cdt	23494.7	0.948	mg/L	0.0038	0.948	mg/L	0.0038	0.40%
QC value within limits for Cd Recovery = 94.81%								
Cot	24633.3	1.02	mg/L	0.005	1.02	mg/L	0.005	0.51%
QC value within limits for Co Recovery = 102.41%								
Crt	73138.4	0.982	mg/L	0.0051	0.982	mg/L	0.0051	0.52%
QC value within limits for Cr Recovery = 98.19%								
Cut	318809.8	0.949	mg/L	0.0026	0.949	mg/L	0.0026	0.28%
QC value within limits for Cu Recovery = 94.88%								
Fet	929.6	0.964	mg/L	0.0100	0.964	mg/L	0.0100	1.03%
QC value within limits for Fe Recovery = 96.44%								
Kt	10806.0	9.71	mg/L	0.017	9.71	mg/L	0.017	0.18%
QC value within limits for K Recovery = 97.08%								
Mgt	3375.4	1.04	mg/L	0.010	1.04	mg/L	0.010	0.93%
QC value within limits for Mg Recovery = 104.07%								
Mnt	548665.3	1.02	mg/L	0.002	1.02	mg/L	0.002	0.20%
QC value within limits for Mn Recovery = 101.58%								
Mot	10306.5	0.945	mg/L	0.0002	0.945	mg/L	0.0002	0.02%
QC value within limits for Mo Recovery = 94.51%								
Nat	2207.7	1.01	mg/L	0.027	1.01	mg/L	0.027	2.69%
QC value within limits for Na Recovery = 100.66%								
Nit	21709.7	1.03	mg/L	0.006	1.03	mg/L	0.006	0.57%
QC value within limits for Ni Recovery = 102.87%								
Pbt	4650.2	1.03	mg/L	0.003	1.03	mg/L	0.003	0.27%
QC value within limits for Pb Recovery = 102.78%								
Sbt	1699.3	0.924	mg/L	0.0013	0.924	mg/L	0.0013	0.14%
QC value within limits for Sb Recovery = 92.45%								
Set	1098.0	0.914	mg/L	0.0016	0.914	mg/L	0.0016	0.17%
QC value within limits for Se Recovery = 91.40%								
Tlt	2672.5	1.04	mg/L	0.000	1.04	mg/L	0.000	0.02%
QC value within limits for Tl Recovery = 103.63%								
Vt	147187.0	0.949	mg/L	0.0046	0.949	mg/L	0.0046	0.48%
QC value within limits for V Recovery = 94.92%								
Znt	44262.6	0.986	mg/L	0.0044	0.986	mg/L	0.0044	0.44%
QC value within limits for Zn Recovery = 98.62%								
Alxt	69807.4	878	ug/L	8.1	0.878	mg/L	0.0081	0.92%
QC value less than the lower limit for Alx Recovery = 87.84%								
Bext	2643844.0	927	ug/L	0.5	0.927	mg/L	0.0005	0.05%
QC value within limits for Bex Recovery = 92.74%								

QC Failed. Retry.

Sequence No.: 97
Sample ID: QC-25 1ppm
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 7/13/2007 04:56:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: QC-25 1ppm

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: QC-25 1ppm

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	444168.0	106	%	0.5				0.43%
Yr	170696.1	99.2	%	1.30				1.31%
Agt	276635.4	1.09	mg/L	0.006	1.09	mg/L	0.006	0.53%
QC value within limits for Ag Recovery = 108.61%								
Alt	2978.2	0.949	mg/L	0.0051	0.949	mg/L	0.0051	0.54%
QC value within limits for Al Recovery = 94.87%								
Ast	1754.8	0.941	mg/L	0.0086	0.941	mg/L	0.0086	0.92%
QC value within limits for As Recovery = 94.14%								
B_t	27685.5	0.910	mg/L	0.0118	0.910	mg/L	0.0118	1.30%
QC value within limits for B_ Recovery = 90.97%								
Bat	67802.0	1.02	mg/L	0.009	1.02	mg/L	0.009	0.92%
QC value within limits for Ba Recovery = 101.66%								
Bet	2635243.2	0.924	mg/L	0.0039	0.924	mg/L	0.0039	0.42%
QC value within limits for Be Recovery = 92.44%								
Cat	5963.7	1.01	mg/L	0.013	1.01	mg/L	0.013	1.30%
QC value within limits for Ca Recovery = 100.84%								
Cdt	23289.0	0.940	mg/L	0.0113	0.940	mg/L	0.0113	1.20%
QC value within limits for Cd Recovery = 93.97%								
Cot	24383.1	1.01	mg/L	0.012	1.01	mg/L	0.012	1.15%
QC value within limits for Co Recovery = 101.37%								
Crt	72236.5	0.970	mg/L	0.0092	0.970	mg/L	0.0092	0.95%
QC value within limits for Cr Recovery = 96.98%								
Cut	320323.0	0.953	mg/L	0.0033	0.953	mg/L	0.0033	0.35%
QC value within limits for Cu Recovery = 95.33%								
Fet	941.7	0.977	mg/L	0.0068	0.977	mg/L	0.0068	0.70%
QC value within limits for Fe Recovery = 97.69%								
Kt	10829.1	9.73	mg/L	0.080	9.73	mg/L	0.080	0.82%
QC value within limits for K Recovery = 97.29%								
Mgt	3405.5	1.05	mg/L	0.012	1.05	mg/L	0.012	1.10%
QC value within limits for Mg Recovery = 105.00%								
Mnt	546709.4	1.01	mg/L	0.006	1.01	mg/L	0.006	0.62%
QC value within limits for Mn Recovery = 101.22%								
Mot	10281.3	0.943	mg/L	0.0076	0.943	mg/L	0.0076	0.80%
QC value within limits for Mo Recovery = 94.28%								
Nat	2224.7	1.01	mg/L	0.001	1.01	mg/L	0.001	0.11%
QC value within limits for Na Recovery = 101.44%								
Nit	21478.3	1.02	mg/L	0.006	1.02	mg/L	0.006	0.58%
QC value within limits for Ni Recovery = 101.77%								
Pbt	4618.6	1.02	mg/L	0.010	1.02	mg/L	0.010	0.96%
QC value within limits for Pb Recovery = 102.08%								
Sbt	1705.1	0.928	mg/L	0.0055	0.928	mg/L	0.0055	0.59%
QC value within limits for Sb Recovery = 92.79%								
Set	1101.9	0.917	mg/L	0.0057	0.917	mg/L	0.0057	0.62%
QC value within limits for Se Recovery = 91.73%								
Tlt	2662.8	1.03	mg/L	0.009	1.03	mg/L	0.009	0.85%
QC value within limits for Tl Recovery = 103.25%								
Vt	146052.8	0.942	mg/L	0.0085	0.942	mg/L	0.0085	0.91%
QC value within limits for V Recovery = 94.19%								
Znt	43928.1	0.979	mg/L	0.0082	0.979	mg/L	0.0082	0.84%
QC value within limits for Zn Recovery = 97.88%								
Alxt	69796.9	878	ug/L	15.7	0.878	mg/L	0.0157	1.79%
QC value less than the lower limit for Alx Recovery = 87.82%								
Bext	2635243.2	924	ug/L	3.9	0.924	mg/L	0.0039	0.42%

QC value within limits for Bex Recovery = 92.44%
QC Failed. Continue with analysis.

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

Autosampler Location: 4
Date Collected: 7/13/2007 05:00:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ECV

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: ECV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	419313.1	101	%	0.1				0.07%
Yr	165943.1	96.4	%	1.68				1.74%
Ag†	223655.3	0.878	mg/L	0.0006	0.878	mg/L	0.0006	0.07%
QC value within limits for Ag		Recovery = 87.81%						
Al†	14684.0	4.68	mg/L	0.087	4.68	mg/L	0.087	1.86%
QC value within limits for Al		Recovery = 93.55%						
As†	8748.0	4.69	mg/L	0.041	4.69	mg/L	0.041	0.87%
QC value within limits for As		Recovery = 93.86%						
B_†	73343.7	2.41	mg/L	0.011	2.41	mg/L	0.011	0.45%
QC value within limits for B_		Recovery = 96.21%						
Ba†	326936.8	4.90	mg/L	0.002	4.90	mg/L	0.002	0.04%
QC value within limits for Ba		Recovery = 98.04%						
Be†	5672703.1	1.99	mg/L	0.018	1.99	mg/L	0.018	0.91%
QC value within limits for Be		Recovery = 99.49%						
Ca†	295110.1	49.9	mg/L	0.19	49.9	mg/L	0.19	0.38%
QC value within limits for Ca		Recovery = 99.80%						
Cd†	60381.3	2.41	mg/L	0.005	2.41	mg/L	0.005	0.20%
QC value within limits for Cd		Recovery = 96.25%						
Co†	119241.5	4.96	mg/L	0.008	4.96	mg/L	0.008	0.15%
QC value within limits for Co		Recovery = 99.14%						
Cr†	362448.2	4.87	mg/L	0.003	4.87	mg/L	0.003	0.05%
QC value within limits for Cr		Recovery = 97.32%						
Cu†	1627444.1	4.84	mg/L	0.023	4.84	mg/L	0.023	0.47%
QC value within limits for Cu		Recovery = 96.86%						
Fe†	4678.1	4.85	mg/L	0.090	4.85	mg/L	0.090	1.85%
QC value within limits for Fe		Recovery = 97.06%						
K†	55043.7	49.5	mg/L	0.07	49.5	mg/L	0.07	0.14%
QC value within limits for K		Recovery = 98.90%						
Mg†	164792.2	50.8	mg/L	0.18	50.8	mg/L	0.18	0.36%
QC value within limits for Mg		Recovery = 101.62%						
Mn†	2689563.2	4.98	mg/L	0.003	4.98	mg/L	0.003	0.05%
QC value within limits for Mn		Recovery = 99.59%						
Mo†	53232.0	4.88	mg/L	0.009	4.88	mg/L	0.009	0.19%
QC value within limits for Mo		Recovery = 97.63%						
Na†	105154.2	47.9	mg/L	0.13	47.9	mg/L	0.13	0.27%
QC value within limits for Na		Recovery = 95.89%						
Ni†	105073.7	4.98	mg/L	0.006	4.98	mg/L	0.006	0.12%
QC value within limits for Ni		Recovery = 99.58%						
Pb†	22437.5	4.96	mg/L	0.007	4.96	mg/L	0.007	0.13%
QC value within limits for Pb		Recovery = 99.18%						
Sb†	8634.4	4.70	mg/L	0.028	4.70	mg/L	0.028	0.60%
QC value within limits for Sb		Recovery = 94.01%						
Se†	5851.1	4.87	mg/L	0.020	4.87	mg/L	0.020	0.40%
QC value within limits for Se		Recovery = 97.40%						
Tl†	13130.7	5.09	mg/L	0.003	5.09	mg/L	0.003	0.07%
QC value within limits for Tl		Recovery = 101.84%						
V†	760655.0	4.90	mg/L	0.003	4.90	mg/L	0.003	0.05%
QC value within limits for V		Recovery = 98.09%						
Zn†	222791.2	4.97	mg/L	0.008	4.97	mg/L	0.008	0.17%
QC value within limits for Zn		Recovery = 99.31%						
Alx†	365833.6	4600	ug/L	24.6	4.60	mg/L	0.025	0.53%
QC value within limits for Alx		Recovery = 92.06%						
Bex†	5672703.1	1990	ug/L	18.1	1.99	mg/L	0.018	0.91%
QC value within limits for Bex		Recovery = 99.49%						

All analyte(s) passed QC.

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

Autosampler Location: 0
Data Collected: 7/13/2007 05:04:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ECB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: ECB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	432383.0	104	%	0.2				0.16%
Yr	168749.6	98.1	%	0.28				0.28%
Ag†	-44.4	-0.00017	mg/L	0.000362	-0.00017	mg/L	0.000362	207.43%
QC value within limits for Ag	Recovery = Not calculated							
Al†	-12.3	-0.00390	mg/L	0.024172	-0.00390	mg/L	0.024172	619.13%
QC value within limits for Al	Recovery = Not calculated							
As†	21.2	0.0114	mg/L	0.00046	0.0114	mg/L	0.00046	4.07%
QC value within limits for As	Recovery = Not calculated							
B_†	200.2	0.00659	mg/L	0.001004	0.00659	mg/L	0.001004	15.23%
QC value within limits for B_	Recovery = Not calculated							
Ba†	6.4	0.00010	mg/L	0.000020	0.00010	mg/L	0.000020	20.79%
QC value within limits for Ba	Recovery = Not calculated							
Be†	101.5	0.00004	mg/L	0.000042	0.00004	mg/L	0.000042	119.11%
QC value within limits for Be	Recovery = Not calculated							
Ca†	-12.6	-0.00213	mg/L	0.000215	-0.00213	mg/L	0.000215	10.08%
QC value within limits for Ca	Recovery = Not calculated							
Cd†	3.7	-0.00005	mg/L	0.000121	-0.00005	mg/L	0.000121	253.94%
QC value within limits for Cd	Recovery = Not calculated							
Co†	-2.0	-0.00008	mg/L	0.000170	-0.00008	mg/L	0.000170	205.20%
QC value within limits for Co	Recovery = Not calculated							
Cr†	-1.2	-0.00002	mg/L	0.000071	-0.00002	mg/L	0.000071	445.82%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	-82.8	-0.00025	mg/L	0.000218	-0.00025	mg/L	0.000218	88.32%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	5.6	0.00581	mg/L	0.000337	0.00581	mg/L	0.000337	5.80%
QC value within limits for Fe	Recovery = Not calculated							
K†	-39.4	-0.0354	mg/L	0.01125	-0.0354	mg/L	0.01125	31.80%
QC value within limits for K	Recovery = Not calculated							
Mg†	-0.8	-0.00025	mg/L	0.000442	-0.00025	mg/L	0.000442	173.55%
QC value within limits for Mg	Recovery = Not calculated							
Mn†	38.6	0.00007	mg/L	0.000006	0.00007	mg/L	0.000006	8.74%
QC value within limits for Mn	Recovery = Not calculated							
Mo†	0.9	0.00009	mg/L	0.000077	0.00009	mg/L	0.000077	88.59%
QC value within limits for Mo	Recovery = Not calculated							
Na†	-0.8	-0.00035	mg/L	0.000181	-0.00035	mg/L	0.000181	51.43%
QC value within limits for Na	Recovery = Not calculated							
Ni†	-0.9	-0.00004	mg/L	0.000163	-0.00004	mg/L	0.000163	391.71%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	2.9	0.00064	mg/L	0.000153	0.00064	mg/L	0.000153	23.93%
QC value within limits for Pb	Recovery = Not calculated							
Sb†	14.8	0.00821	mg/L	0.001292	0.00821	mg/L	0.001292	15.74%
QC value within limits for Sb	Recovery = Not calculated							
Se†	7.6	0.00636	mg/L	0.006244	0.00636	mg/L	0.006244	98.19%
QC value within limits for Se	Recovery = Not calculated							
Tl†	8.5	0.00329	mg/L	0.000889	0.00329	mg/L	0.000889	27.04%
QC value within limits for Tl	Recovery = Not calculated							
V†	-17.6	-0.00011	mg/L	0.000172	-0.00011	mg/L	0.000172	152.48%
QC value within limits for V	Recovery = Not calculated							
Zn†	4.9	0.00011	mg/L	0.000061	0.00011	mg/L	0.000061	55.54%
QC value within limits for Zn	Recovery = Not calculated							
Alx†	7.3	0.0913	ug/L	0.03884	0.00009	mg/L	0.000039	42.53%
QC value within limits for Alx	Recovery = Not calculated							
Bex†	101.5	0.0356	ug/L	0.04241	0.00004	mg/L	0.000042	119.11%
QC value within limits for Bex	Recovery = Not calculated							

All analyte(s) passed QC.

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

Autosampler Location: 21
Date Collected: 7/13/2007 05:07:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MRL

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	433481.2	104	%	1.3				1.23%
Yr	167390.2	97.3	%	0.68				0.69%
Agt	2504.1	0.00983	mg/L	0.000601	0.00983	mg/L	0.000601	6.11%
QC value within limits for Ag		Recovery = 98.32%						
Alt	142.8	0.0455	mg/L	0.01418	0.0455	mg/L	0.01418	31.16%
QC value within limits for Al		Recovery = 90.98%						
Ast	176.6	0.0948	mg/L	0.00119	0.0948	mg/L	0.00119	1.26%
QC value within limits for As		Recovery = 94.77%						
B_t	1500.3	0.0493	mg/L	0.00034	0.0493	mg/L	0.00034	0.68%
QC value within limits for B_		Recovery = 98.61%						
Bat	1328.3	0.0199	mg/L	0.00026	0.0199	mg/L	0.00026	1.29%
QC value within limits for Ba		Recovery = 99.58%						
Bet	3058.7	0.00107	mg/L	0.000019	0.00107	mg/L	0.000019	1.73%
QC value within limits for Be		Recovery = 107.29%						
Cat	5839.8	0.987	mg/L	0.0043	0.987	mg/L	0.0043	0.43%
QC value within limits for Ca		Recovery = 98.75%						
Cdt	143.1	0.00440	mg/L	0.000157	0.00440	mg/L	0.000157	3.58%
QC value within limits for Cd		Recovery = 87.91%						
Cot	1201.2	0.0499	mg/L	0.00057	0.0499	mg/L	0.00057	1.14%
QC value within limits for Co		Recovery = 99.87%						
Crt	739.2	0.00992	mg/L	0.000095	0.00992	mg/L	0.000095	0.96%
QC value within limits for Cr		Recovery = 99.24%						
Cut	3080.4	0.00921	mg/L	0.000017	0.00921	mg/L	0.000017	0.18%
QC value within limits for Cu		Recovery = 92.06%						
Fet	22.3	0.0232	mg/L	0.00336	0.0232	mg/L	0.00336	14.50%
QC value within limits for Fe		Recovery = 115.91%						
Kt	986.0	0.886	mg/L	0.0053	0.886	mg/L	0.0053	0.59%
QC value within limits for K		Recovery = 88.59%						
Mgt	329.9	0.102	mg/L	0.0018	0.102	mg/L	0.0018	1.79%
QC value within limits for Mg		Recovery = 101.71%						
Mnt	1167.3	0.00216	mg/L	0.000036	0.00216	mg/L	0.000036	1.68%
QC value within limits for Mn		Recovery = 108.06%						
Mot	204.4	0.0187	mg/L	0.00028	0.0187	mg/L	0.00028	1.47%
QC value within limits for Mo		Recovery = 93.72%						
Nat	2044.9	0.932	mg/L	0.0170	0.932	mg/L	0.0170	1.82%
QC value within limits for Na		Recovery = 93.24%						
Nit	427.7	0.0203	mg/L	0.00028	0.0203	mg/L	0.00028	1.36%
QC value within limits for Ni		Recovery = 101.34%						
Pbt	99.2	0.0219	mg/L	0.00045	0.0219	mg/L	0.00045	2.04%
QC value within limits for Pb		Recovery = 109.58%						
Sbt	88.3	0.0487	mg/L	0.00044	0.0487	mg/L	0.00044	0.91%
QC value within limits for Sb		Recovery = 97.35%						
Set	116.9	0.0972	mg/L	0.00499	0.0972	mg/L	0.00499	5.14%
QC value within limits for Se		Recovery = 97.17%						
Tlt	282.8	0.109	mg/L	0.0000	0.109	mg/L	0.0000	0.03%
QC value within limits for Tl		Recovery = 109.37%						
Vt	300.4	0.00198	mg/L	0.000030	0.00198	mg/L	0.000030	1.53%
QC value within limits for V		Recovery = 99.04%						
Znt	680.5	0.0196	mg/L	0.00024	0.0196	mg/L	0.00024	1.23%
QC value within limits for Zn		Recovery = 98.09%						
Alxt	3231.3	40.7	ug/L	0.77	0.0407	mg/L	0.00077	1.90%
QC value within limits for Alx		Recovery = 81.32%						
Bext	3058.7	1.07	ug/L	0.019	0.00107	mg/L	0.000019	1.73%
QC value within limits for Bex		Recovery = 107.29%						

All analyte(s) passed QC.

Analytical Sequence
Method: 200.7&6010_070703

Seq.	Loc.	ID	Status
1	0	Calib Blank 1	Applied
2	15	Standard 2	Applied
3	15	ICV	QC Passed
4	9	LINEARITY	QC Passed
5	10	ICSA	QC Passed
6	11	ICSAB	QC Failed
7	0	Wash	QC Passed
8	12	QC-25 1ppm	QC Failed
9	12	QC-25 1ppm	QC Failed
10	4	CCV	QC Passed
11	0	ICB	QC Passed
12	20	MRL	QC Passed
13	16	FILTERCHECK	Analyzed
14	22	MRL/2	Analyzed
15	38	MBLANK	Analyzed
16	39	LCS	Analyzed
17	40	LCSD	Analyzed
18	41	2707110393	Analyzed
19	42	2707110393MS	Analyzed
20	43	2707110393MSD	Analyzed
21	44	2707110398	Analyzed
22	45	2707110395	Analyzed
23	4	CCV	QC Passed
24	0	CCB	QC Passed
25	46	2707110669	Analyzed
26	47	2707110665	Analyzed
27	48	2707110667	Analyzed
28	49	2707110390	Analyzed
29	50	2707110396	Analyzed
30	51	2707110663	Analyzed
31	52	2707110664	Analyzed
32	53	2707110569	Analyzed
33	54	2707110569MS	Analyzed
34	55	2707110569MSD	Analyzed
35	4	CCV	QC Passed
36	0	CCB	QC Passed
37	5	MCV	QC Passed
38	56	2707110571	Analyzed
39	57	2707110575	Analyzed
40	58	2707110573	Analyzed
41	59	2707110572	Analyzed
42	60	2707110597	Analyzed
43	61	2707110592	Analyzed
44	62	2707110419	Analyzed
45	63	2707110568	Analyzed
46	64	2707110576	Analyzed
47	65	MBLANK	Analyzed
48	4	CCV	QC Passed
49	0	CCB	QC Passed
50	66	LCS	Analyzed
51	67	LCSD	Analyzed
52	68	2707110668	Analyzed
53	69	2707110448MS	Analyzed
54	70	2707110668MSD	Analyzed
55	71	2707110670	Analyzed
56	72	2707110596	Analyzed
57	73	2707110574	Analyzed
58	74	2707100338	Analyzed
59	75	2707100341	Analyzed
60	4	CCV	QC Passed
61	0	CCB	QC Passed
62	5	MCV	QC Passed
63	76	2704100342	Analyzed
64	77	2704110666	Analyzed
65	78	2707100308	Analyzed
66	79	2707100273	Analyzed
67	80	2707100277	Analyzed

68	81	2707100277MS	Analyzed
69	82	2707100277MSD	Analyzed
70	83	2707100305	Analyzed
71	84	2707100265	Analyzed
72	85	2707110139	Analyzed
73	4	CCV	QC Passed
74	0	CCB	QC Passed
75	86	2707110141	Analyzed
76	87	2707110143	Analyzed
77	88	2707110157	Analyzed
78	89	2707110159	Analyzed
79	90	2707110160	Analyzed
80	91	2707100380	Analyzed
81	92	MBLANK	Analyzed
82	93	LCS	Analyzed
83	94	LCSD	Analyzed
84	95	2707090217	Analyzed
85	4	CCV	QC Passed
86	0	CCB	QC Passed
87	5	MCV	QC Passed
88	96	2707090217MS	Analyzed
89	97	2707090217MSD	Analyzed
90	98	2707110288	Analyzed
91	99	2707120227	Analyzed
92	100	2707110559_2X	Analyzed
93	10	ICSA	QC Passed
94	11	ICSAB	QC Failed
95	0	Wash	QC Passed
96	12	QC-25 1ppm	QC Failed
97	12	QC-25 1ppm	QC Failed
98	4	ECV	QC Passed
99	0	ECB	QC Passed
100	21	MRL	QC Passed

Sequence No.: 84
Sample ID: 2707090217
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 95
Date Collected: 7/13/2007 04:03:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2707090217

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2707090217

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	415691.8	99.6	%	0.85				0.86%
Yr	164834.0	95.8	%	1.02				1.07%
Agt	48.9	0.00019	mg/L	0.000415	0.00019	mg/L	0.000415	216.00%
Alt	48.9	0.0156	mg/L	0.00335	0.0156	mg/L	0.00335	21.49%
Ast	-29.9	-0.0161	mg/L	0.00195	-0.0161	mg/L	0.00195	12.17%
B_t	13319.2	0.439	mg/L	0.0012	0.439	mg/L	0.0012	0.27%
Bat	6211.5	0.0931	mg/L	0.00042	0.0931	mg/L	0.00042	0.45%
Bet	-125.6	-0.00004	mg/L	0.000053	-0.00004	mg/L	0.000053	120.05%
Cat	359223.8	60.7	mg/L	0.02	60.7	mg/L	0.02	0.04%
Cdt	-8.3	-0.00006	mg/L	0.000032	-0.00006	mg/L	0.000032	53.92%
Cot	0.2	0.00001	mg/L	0.000093	0.00001	mg/L	0.000093	925.40%
Crt	-36.0	-0.00048	mg/L	0.000216	-0.00048	mg/L	0.000216	44.65%
Cut	303.2	0.00090	mg/L	0.000295	0.00090	mg/L	0.000295	32.76%
Fet	-0.8	-0.00083	mg/L	0.004789	-0.00083	mg/L	0.004789	576.63%
Kt	6678.4	6.00	mg/L	0.014	6.00	mg/L	0.014	0.24%
Mgt	88131.0	27.2	mg/L	0.04	27.2	mg/L	0.04	0.16%
Mnt	526625.8	0.975	mg/L	0.0008	0.975	mg/L	0.0008	0.09%
Mot	32.3	0.00296	mg/L	0.000480	0.00296	mg/L	0.000480	16.18%
Nat	369830.6	169	mg/L	1.6	169	mg/L	1.6	0.93%
Nit	145.0	0.00687	mg/L	0.000306	0.00687	mg/L	0.000306	4.45%
Pbt	-14.0	-0.00308	mg/L	0.000401	-0.00308	mg/L	0.000401	13.00%
Sbt	6.3	0.00353	mg/L	0.001547	0.00353	mg/L	0.001547	43.84%
Set	-35.1	-0.0292	mg/L	0.00193	-0.0292	mg/L	0.00193	6.62%
Tlt	13.1	0.00510	mg/L	0.002453	0.00510	mg/L	0.002453	48.08%
Vt	936.4	0.00600	mg/L	0.000113	0.00600	mg/L	0.000113	1.88%
Znt	-126.1	-0.00288	mg/L	0.000152	-0.00288	mg/L	0.000152	5.29%
Alxt	1206.1	15.2	ug/L	1.37	0.0152	mg/L	0.00137	9.03%
Bext	-125.6	-0.0441	ug/L	0.05288	-0.00004	mg/L	0.000053	120.05%

Sequence No.: 92
Sample ID: 2707110559_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 100
Date Collected: 7/13/2007 04:38:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2707110559_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2707110559_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	382633.2	91.7	%	0.79				0.86%
Yr	157952.7	91.8	%	0.10				0.11%
Agt	-271.8	-0.00107	mg/L	0.000016	-0.00213	mg/L	0.000033	1.54%
Alt	-11.1	-0.00354	mg/L	0.004907	-0.00709	mg/L	0.009814	138.46%
Ast	4.2	0.00223	mg/L	0.001607	0.00445	mg/L	0.003214	72.19%
B_t	54024.3	1.78	mg/L	0.002	3.56	mg/L	0.005	0.13%
Bat	790.1	0.0118	mg/L	0.00014	0.0237	mg/L	0.00029	1.21%
Bet	-1004.6	-0.00035	mg/L	0.000046	-0.00070	mg/L	0.000092	13.04%
Cat	1237810.7	209	mg/L	1.0	419	mg/L	1.9	0.46%
Cdt	-14.4	-0.00062	mg/L	0.000156	-0.00124	mg/L	0.000312	25.13%
Cot	60.6	0.00252	mg/L	0.000175	0.00504	mg/L	0.000350	6.95%
Crt	1974.7	0.0265	mg/L	0.00025	0.0530	mg/L	0.00049	0.93%
Cut	630.0	0.00188	mg/L	0.000119	0.00375	mg/L	0.000239	6.36%
Fet	8.4	0.00867	mg/L	0.003879	0.0173	mg/L	0.00776	44.74%
Kt	16642.6	15.0	mg/L	0.07	29.9	mg/L	0.15	0.49%
Mgt	323307.3	99.7	mg/L	0.34	199	mg/L	0.7	0.34%
Mnt	261424.4	0.484	mg/L	0.0001	0.968	mg/L	0.0001	0.01%
Mot	471.1	0.0432	mg/L	0.00055	0.0864	mg/L	0.00111	1.28%
Nat	1410685.7	643	mg/L	3.4	1290	mg/L	6.8	0.53%
Nit	123.9	0.00587	mg/L	0.000073	0.0117	mg/L	0.00015	1.24%
Pbt	-29.6	-0.00654	mg/L	0.001925	-0.0131	mg/L	0.00385	29.44%
Sbt	10.9	0.00560	mg/L	0.003704	0.0112	mg/L	0.00741	66.20%
Set	-66.9	-0.0555	mg/L	0.00382	-0.111	mg/L	0.0076	6.88%
Tlt	34.6	0.0135	mg/L	0.00174	0.0269	mg/L	0.00348	12.94%
Vt	3779.2	0.0244	mg/L	0.00009	0.0488	mg/L	0.00018	0.37%
Znt	-104.5	-0.00238	mg/L	0.000020	-0.00477	mg/L	0.000040	0.84%
Alxt	-124.8	-1.57	ug/L	0.338	-0.00314	mg/L	0.000676	21.54%
Bext	-1004.6	-0.352	ug/L	0.0459	-0.00070	mg/L	0.000092	13.04%

EPA 200.7/6010B QC Check List

Analyst CW Analysis Date 7/19/07 Reviewer/Date _____

Instrumnet PerKin Elmer Optima 4300DV

✓ All sample analyzed within 6 month holding time

✓ All sample raw concentraction below the high standard or linear anged samples marked for dilution and rerun

Initial and closing QC
- ✓ ICV within +/- 5%
- ✓ Linearity check +/- 10%
- ✓ ICSAB +/- 20%
- ✓ 1 PPM check +/-/10%
- ✓ 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% → except 1st. MCV.
- ✓ 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 +/-20%
- ✓ 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

N/A QIR needed for failed QC

✓ Special Det Code noted on the cover sheet T-C-10VS T-C-DV

N/A R value for multi point calibration is > 0.995

✓ Proper MRL check ran for special low MRL samples T-C-10V

Reagent and Standards used for
Optima 4300 DV
Updated 07/10/07

Int: NS
Date: 7/20/07

Method 200.7/6010

ICP SUMMARY SHEET

File ID: 070719
Date Started: 7/19/07
Analyst ID: WBH

SAMPLE ID

LINEARITY	(12:08)	Wash	(12:19)	FILTERCHECK	(12:38)
2707160228	(13:00)	2707110558_2	(13:11)	2707140032_2	(13:44)
2707120644_2	(13:48)	2707170333_2	(13:52)	WASH	(14:00)
2707160293	(14:04)	2707110301	(14:08)	2707170473	(14:12)
X707140032_1	(14:17)	2707180018	(14:45)	2707180265	(14:56)
2707180285	(15:00)	2707170684	(15:04)	2707170679	(15:08)
2707180349	(15:12)	2707180582	(15:28)	2707180422	(15:32)
2707180483	(15:36)	2707180485	(15:41)	2707180484	(15:45)
2707180035	(15:57)	2707180061	(16:02)	2707180064	(16:06)
2707180582	(17:02)	2707180422	(17:13)	2707180483	(17:17)
2707180485	(17:22)	2707180484	(17:26)	2707180035	(17:38)
2707180061	(17:42)	2707180064	(17:47)	2707180279	(17:51)
2707180034	(18:06)	2707180062	(18:10)	2707180286	(18:14)
2707180040	(18:19)	2707180065	(18:23)	2707180041	(18:37)
2707180063	(18:54)	2707180245	(18:58)	2707180269	(19:02)
2707180240	(19:06)	2707180251	(19:11)	2707180215	(19:21)
2707180217	(19:26)	D707180215	(19:41)	D707180217	(19:45)
2709170388	(19:49)	2707190286	(19:54)	2707190343	(19:57)
2707190344	(20:02)	2707190345	(20:06)	2707190306	(20:11)
2707190304	(20:15)	2707190305	(20:19)	Wash	(20:30)

COMMENT: First MCV was not used due to prog. error.
Subsequent MCVs were different solution @ 7/20/07
FC-low, FC-Dis

Analyst: WBH

Approved By: MW 7/24/07

BATCH NUMBER for 070719

Aug 7/2019

Test Parameter:

SCA YR AG AL AS B_ BA BE CA CD CO CR CU FE K MG MN MO NA NI

Batch ID: 2707160228

2707160228
2707120644_2X
2707110301
2707110558_2X
2707170333_2X
2707170473
2707140032_2X
2707160293

Batch ID: 2707180018

2707180018
2707170684
2707180582
2707180485
2707180061
2707180422
2707180484
2707180064
2707180062
2707180065
2707180265
2707170679
2707180422
2707180484
2707180064
2707180483
2707180035
2707180279
2707180286
2707180285
2707180349
2707180483
2707180035
2707180582
2707180485
2707180061
2707180034
2707180040

Batch ID: 2707180041

2707180041
2707180269
2707180215
2707190286
2707190345
2707190305
2707180063
2707180240
2707180217
2707190343
2707190306
2707180245
2707180251
2709170388
2707190344
2707190304

File ID: 070719

CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
ICV	7/19/07	12:04	1	10.055	10.1	95-105	100%
LINEARITY	7/19/07	12:08	1	0.0017	.0017		
ICSA	7/19/07	12:11	1	-0.0002	ND	80-120	
ICSAB	7/19/07	12:15	1	.24332	.243	80-120	97.3%
Wash	7/19/07	12:19	1	0.0002	0.0001		
QC-25 1ppm	7/19/07	12:22	1	.97547	.980		
CCV	7/19/07	12:27	1	4.9669	4.97	90-110	99.3%
ICB	7/19/07	12:31	1	0.0001	0.0000		
MRL	7/19/07	12:34	1	.01015	.0102	50-150	101%
FILTERCHECK	7/19/07	12:38	1	-0.0004	ND		
MRL/2	7/19/07	12:42	1	0.0052	.0052		
MRL2007	7/19/07	12:45	1	0.0100	.01		
MBLANK2007	7/19/07	12:49	1	-0.0003	ND		
LCS	7/19/07	12:53	1	1.0154	1.02	85-115	101%
LCSD	7/19/07	12:57	1	.94001	.94	85-115	94.0%
2707160228	7/19/07	13:00	1	0.0002	0.0001		
2707160228MS	7/19/07	13:03	1	1.0351	1.04	[1.035]	103%
2707160228MSD	7/19/07	13:07	1	.97467	.975	[0.975]	97.4%
2707160228T	7/19/07	13:07	1		1.00	70 - 130	
2707110558_2X	7/19/07	13:11	2	0.0035	.0035		
CCV	7/19/07	13:38	1	5.0627	5.06	90-110	101%
CCB	7/19/07	13:41	1	0.0005	0.0004		
2707140032_2X	7/19/07	13:44	2	2.2520	2.3		
2707120644_2X	7/19/07	13:48	2	0.0031	.0031		
2707170333_2X	7/19/07	13:52	2	0.0061	.0061		
WASH	7/19/07	14:00	1	0.0003	0.0002		
2707160293	7/19/07	14:04	1	-0.0003	ND		
2707110301	7/19/07	14:08	1	0.0028	.0028		
2707170473	7/19/07	14:12	1	-0.0006	ND		
X707140032_10X	7/19/07	14:17	10	2.3031	2.3		
MBLANK	7/19/07	14:21	1	0.0006	0.0006		
CCV	7/19/07	14:25	1	5.0384	5.04	90-110	100%
CCB	7/19/07	14:28	1	0.0005	0.0004		
MCV	7/19/07	14:34	1	4.3644	4.36	90-110	~~174%~~ Q
LCS	7/19/07	14:38	1	.97863	.979	85-115	97.8%
LCSD	7/19/07	14:41	1	.97575	.976	85-115	97.5%
2707180018	7/19/07	14:45	1	-0.0000	ND		
2707180018MS	7/19/07	14:49	1	.97695	.977	[0.977]	97.6%
2707180018MSD	7/19/07	14:53	1	.96998	.97	[0.970]	96.9%
2707180018T	7/19/07	14:53	1		1.00	70 - 130	
2707180265	7/19/07	14:56	1	0.0000	0		
2707180285	7/19/07	15:00	1	0.0008	0.0008		
2707170684	7/19/07	15:04	1	0.0003	0.0002		
2707170679	7/19/07	15:08	1	-0.0001	ND		
2707180349	7/19/07	15:12	1	0.0004	0.0003		
CCV	7/19/07	15:18	1	5.0760	5.08	90-110	101%

File ID: 070719

CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
CCB	7/19/07	15:24	1	0.0003	0.0003		
2707180582	7/19/07	15:28	1	0.0014	.0014		
2707180422	7/19/07	15:32	1	0.0041	.0041		
2707180483	7/19/07	15:36	1	-0.0005	ND		
2707180485	7/19/07	15:41	1	0.0014	.0014		DNR
2707180484	7/19/07	15:45	1	0.0012	.0012		
2707180484MS	7/19/07	15:50	1	.96906	.969	[0.968] 96.7%	
2707180484MSD	7/19/07	15:54	1	.98126	.981	[0.980] 98.0%	
2707180484T	7/19/07	15:54	1		1.00	70 - 130	
2707180035	7/19/07	15:57	1	0.0005	0.0005		
2707180061	7/19/07	16:02	1	0.0046	.0046		
2707180064	7/19/07	16:06	1	0.0012	.0012		
CCV	7/19/07	16:14	1	5.0906	5.09	90-110	101%
CCB	7/19/07	16:20	1	0.0005	0.0004		
MCV	7/19/07	16:24	1	2.5461	2.55	90-110	101%
ICV	7/19/07	16:48	1	9.7869	9.79	95-105	97.8%
CCV	7/19/07	16:52	1	4.9366	4.94	90-110	98.7%
ICB	7/19/07	16:56	1	0.0001	0.0000		
2707180582	7/19/07	17:02	1	0.0009	0.0008		
CCV	7/19/07	17:06	1	5.0229	5.02	90-110	100%
CCB	7/19/07	17:09	1	0.0001	0.0001		
2707180422	7/19/07	17:13	1	0.0035	.0035		
2707180483	7/19/07	17:17	1	-0.0010	ND		
2707180485	7/19/07	17:22	1	0.0009	0.0009		
2707180484	7/19/07	17:26	1	0.0012	.0012		
2707180484MS	7/19/07	17:30	1	.97190	.972	[0.971] 97.0%	
2707180484MSD	7/19/07	17:34	1	.97487	.975	[0.974] 97.3%	
2707180484T	7/19/07	17:34	1		1.00	70 - 130	
2707180035	7/19/07	17:38	1	0.0003	0.0003		
2707180061	7/19/07	17:42	1	0.0041	.0041		
2707180064	7/19/07	17:47	1	0.0009	0.0009		
2707180279	7/19/07	17:51	1	0.0004	0.0004		
CCV	7/19/07	17:55	1	5.0026	5.00	90-110	100%
CCB	7/19/07	17:59	1	-0.0000	ND		
MCV	7/19/07	18:02	1	2.4982	2.5	90-110	99.9%
2707180034	7/19/07	18:06	1	0.0004	0.0003		
2707180062	7/19/07	18:10	1	0.0061	.0061		
2707180286	7/19/07	18:14	1	.01753	.018		
2707180040	7/19/07	18:19	1	0.0001	0.0000		
2707180065	7/19/07	18:23	1	0.0015	.0015		
MBLANK	7/19/07	18:28	1	0.0002	0.0002		
LCS	7/19/07	18:31	1	.98157	.982	85-115	98.1%
LCSD	7/19/07	18:34	1	.98403	.984	85-115	98.4%
2707180041	7/19/07	18:37	1	0.0004	0.0003		
2707180041MS	7/19/07	18:41	1	.95718	.957	[0.957] 95.7%	
CCV	7/19/07	18:44	1	4.9831	4.98	90-110	99.6%
CCB	7/19/07	18:47	1	0.0002	0.0002		
2707180041MSD	7/19/07	18:51	1	.96652	.967	[0.967] 96.6%	
2707180041T	7/19/07	18:51	1		1.00	70 - 130	

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CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
2707180063	7/19/07	18:54	1	0.0028	.0028		
2707180245	7/19/07	18:58	1	0.0464	.046		
2707180269	7/19/07	19:02	1	-0.0008	ND		
2707180240	7/19/07	19:06	1	0.0006	0.0006		
2707180251	7/19/07	19:11	1	0.0007	0.0006		
2707180251MS	7/19/07	19:15	1	.98164	.982 ✓	[0.982]	98.1%
2707180251MSD	7/19/07	19:18	1	.99416	.994 ✓	[0.994]	99.4%
2707180251T	7/19/07	19:18	1		1.00	70 - 130	
2707180215	7/19/07	19:21	1	-0.0007	ND		
2707180217	7/19/07	19:26	1	-0.0007	ND		
CCV	7/19/07	19:30	1	5.0383	5.04 ✓	90-110	100%
CCB	7/19/07	19:33	1	0.0000	0.0000 ✓		
MCV	7/19/07	19:37	1	2.5100	2.51 ✓	90-110	100%
D707180215	7/19/07	19:41	1	-0.0009	ND		
D707180217	7/19/07	19:45	1	-0.0011	ND		
2709170388	7/19/07	19:49	1	-0.0002	ND		
2707190286	7/19/07	19:54	1	-0.0005	ND		
2707190343	7/19/07	19:57	1	-0.0010	ND		
2707190344	7/19/07	20:02	1	0.0009	0.0008		
2707190345	7/19/07	20:06	1	0.0011	.0011		
2707190306	7/19/07	20:11	1	-0.0007	ND		
2707190304	7/19/07	20:15	1	-0.0007	ND		
2707190305	7/19/07	20:19	1	-0.0004	ND		
ICSA	7/19/07	20:22	1	-0.0008	ND	80-120	
ICSAB	7/19/07	20:26	1	.24398	.244 ✓	80-120	97.5%
Wash	7/19/07	20:30	1	-0.0002	ND		
QC-25 1ppm	7/19/07	20:33	1	.98898	.990		
ECV	7/19/07	20:37	1	4.9743	4.97 ✓	90-110	99.4%
ECB	7/19/07	20:40	1	-0.0001	ND ✓		
MRL	7/19/07	20:44	1	0.0095	.0095 ✓	50-150	95.3%

Nebulizer Parameters: Hg_ReAlign

Analyte	Back Pressure	Flow
All	153.0 kPa	0.54 L/min

7/19/2007 09:10:14 Hg ReAlign... Actual peak offset (nm): 0.003
Drift (nm): 0.000 Slit adjustment: 2

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	363770.6
-1.6	15.0	518670.9
-1.2	15.0	646301.5
-0.8	15.0	768020.6
-0.4	15.0	807980.2
0.0	15.0	805535.1
0.4	15.0	747782.2
0.8	15.0	561135.0
1.2	15.0	443975.8
1.6	15.0	353675.5
2.0	15.0	244275.3
-0.4	10.0	5450.5
-0.4	10.5	19925.2
-0.4	11.0	35246.8
-0.4	11.5	57429.9
-0.4	12.0	87901.0
-0.4	12.5	197717.9
-0.4	13.0	268683.7
-0.4	13.5	375991.8
-0.4	14.0	498936.9
-0.4	14.5	720978.8
-0.4	15.0	770183.1
-0.4	15.5	829506.0
-0.4	16.0	787076.2
-0.4	16.5	556113.8
-0.4	17.0	443751.9
-0.4	17.5	321087.9
-0.4	18.0	235628.8
-0.4	18.5	159876.2
-0.4	19.0	55368.4
-0.4	19.5	23215.4
-0.4	20.0	10498.3
-1.2	15.5	664410.2
-0.8	15.5	756679.1
-0.4	15.5	786264.7
0.0	15.5	797996.7
0.4	15.5	749934.0
0.0	13.5	392925.2
0.0	14.0	490011.5
0.0	14.5	717927.7
0.0	15.0	785991.0
0.0	15.5	812197.1
0.0	16.0	752054.1
0.0	16.5	535597.5
0.0	17.0	424174.2
0.0	17.5	329388.3

7/19/2007 09:22:40 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 812197.1 for Axial viewing
Y viewing position set to 15.5 mm having Peak intensity 812197.1 for Axial viewing

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	404793.5
-1.6	15.0	558963.4
-1.2	15.0	676637.0
-0.8	15.0	766377.1
-0.4	15.0	832808.1

0.0	15.0	792974.8
0.4	15.0	734902.0
0.8	15.0	610162.3
1.2	15.0	473587.7
1.6	15.0	352848.5
2.0	15.0	245069.7
-0.4	10.0	11384.6
-0.4	10.5	34563.6
-0.4	11.0	54477.4
-0.4	11.5	86488.2
-0.4	12.0	133820.0
-0.4	12.5	282103.8
-0.4	13.0	381655.3
-0.4	13.5	503612.3
-0.4	14.0	624224.2
-0.4	14.5	817309.3
-0.4	15.0	880953.3
-0.4	15.5	810151.7
-0.4	16.0	687186.6
-0.4	16.5	453302.7
-0.4	17.0	331308.9
-0.4	17.5	232569.0
-0.4	18.0	164006.3
-0.4	18.5	102993.1
-0.4	19.0	24209.3
-0.4	19.5	10006.6
-0.4	20.0	5253.0
-1.2	15.0	674029.6
-0.8	15.0	769655.5
-0.4	15.0	862351.9
0.0	15.0	816241.8
0.4	15.0	705570.1
-0.4	13.0	392296.1
-0.4	13.5	499609.6
-0.4	14.0	638170.4
-0.4	14.5	857479.9
-0.4	15.0	850853.9
-0.4	15.5	772657.9
-0.4	16.0	663465.8
-0.4	16.5	439332.6
-0.4	17.0	329436.0

7/19/2007 09:24:46 aligned for analyte Mn 257.610
X viewing position set to -0.4 mm having Peak intensity 857479.9 for Axial viewing
Y viewing position set to 14.5 mm having Peak intensity 857479.9 for Axial viewing

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	212501.9
-1.6	15.0	310057.3
-1.2	15.0	413785.6
-0.8	15.0	527713.6
-0.4	15.0	584839.2
0.0	15.0	657036.0
0.4	15.0	646532.0
0.8	15.0	556934.7
1.2	15.0	472822.3
1.6	15.0	374804.9
2.0	15.0	276003.6
0.0	10.0	4206.3
0.0	10.5	15203.4
0.0	11.0	27594.5
0.0	11.5	44974.9
0.0	12.0	66559.3
0.0	12.5	149361.9
0.0	13.0	221308.3
0.0	13.5	310199.1
0.0	14.0	408463.9
0.0	14.5	589516.7
0.0	15.0	646279.3

0.0	15.5	688423.9
0.0	16.0	643409.9
0.0	16.5	454277.9
0.0	17.0	361934.2
0.0	17.5	256019.0
0.0	18.0	184719.7
0.0	18.5	126209.7
0.0	19.0	44709.4
0.0	19.5	18199.7
0.0	20.0	8208.5
-0.8	15.5	520880.8
-0.4	15.5	600016.8
0.0	15.5	671171.8
0.4	15.5	657053.4
0.8	15.5	606024.1
0.0	13.5	314286.4
0.0	14.0	399631.3
0.0	14.5	600881.9
0.0	15.0	639943.6
0.0	15.5	688993.7
0.0	16.0	640231.9
0.0	16.5	460157.8
0.0	17.0	345377.2
0.0	17.5	261334.4

7/19/2007 09:54:18 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 688993.7 for Axial viewing
Y viewing position set to 15.5 mm having Peak intensity 688993.7 for Axial viewing

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	218551.8
-1.6	15.0	308722.9
-1.2	15.0	422947.7
-0.8	15.0	517162.5
-0.4	15.0	607655.3
0.0	15.0	661887.8
0.4	15.0	626797.9
0.8	15.0	581667.2
1.2	15.0	479436.0
1.6	15.0	372994.8
2.0	15.0	276864.6
0.0	10.0	8994.8
0.0	10.5	26761.2
0.0	11.0	45070.6
0.0	11.5	68384.5
0.0	12.0	100448.6
0.0	12.5	219149.0
0.0	13.0	291131.6
0.0	13.5	392727.2
0.0	14.0	502674.8
0.0	14.5	665450.5
0.0	15.0	666221.7
0.0	15.5	614757.3
0.0	16.0	532387.8
0.0	16.5	338941.9
0.0	17.0	257915.2
0.0	17.5	181135.5
0.0	18.0	130842.6
0.0	18.5	86212.2
0.0	19.0	19635.8
0.0	19.5	8108.8
0.0	20.0	3823.1
-0.8	15.0	526378.9
-0.4	15.0	620564.2
0.0	15.0	681139.4
0.4	15.0	674886.0
0.8	15.0	571737.2
0.0	13.0	312084.9
0.0	13.5	400457.7

0.0	14.0	495087.2
0.0	14.5	669568.2
0.0	15.0	692213.2
0.0	15.5	645200.0
0.0	16.0	558660.5
0.0	16.5	356857.3
0.0	17.0	257123.3

7/19/2007 09:56:57 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 692213.2 for Axial viewing
Y viewing position set to 15.0 mm having Peak intensity 692213.2 for Axial viewing

Align View X Radial for analyte Mn 257.610

X-position	Y-position	Intensity
-7.0	15.0	1309.9
-6.5	15.0	1289.9
-6.0	15.0	1353.5
-5.5	15.0	1564.3
-5.0	15.0	2265.6
-4.5	15.0	3506.6
-4.0	15.0	4984.5
-3.5	15.0	6690.2
-3.0	15.0	8450.3
-2.5	15.0	10818.7
-2.0	15.0	13705.3
-1.5	15.0	16591.2
-1.0	15.0	19591.9
-0.5	15.0	20887.5
0.0	15.0	26551.2
0.5	15.0	24513.2
1.0	15.0	22018.3
1.5	15.0	18224.3
2.0	15.0	14433.2
2.5	15.0	11886.7
3.0	15.0	8714.9
3.5	15.0	5968.5
4.0	15.0	3361.1
4.5	15.0	2565.9
5.0	15.0	1799.8
5.5	15.0	1167.4
6.0	15.0	957.3
6.5	15.0	828.7
7.0	15.0	727.7

7/19/2007 10:00:01 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 26551.2 for Radial viewing

Analysis Begun

Start Time: 7/19/2007 11:57:41 Plasma On Time: 7/19/2007 05:39:06
Logged In Analyst: Owner Technique: ICP Continuous
Spectrometer Model: Optima 4300 DV, S/N 077N2121801Autosampler Model: AS-93plus

Sample Information File: C:\pe\Owner\Sample Information\070719.sif
Batch ID: 070719
Results Data Set: 070719
Results Library: C:\pe\Owner\Results\Results.mdb

Method Loaded
Method Name: 200.7&6010_070703 Method Last Saved: 7/16/2007 14:45:32
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: 7/19/2007 11:57:42
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Calib Units
Sca	371297.6	1198.63	0.32%	100	%
Yr	173277.1	1449.06	0.84%	100	%
Ag†	384.0	83.03	21.62%	[0.00]	mg/L
Al†	38.9	30.38	78.01%	[0.00]	mg/L
As†	3.2	2.27	71.10%	[0.00]	mg/L
B_†	69.0	1.33	1.93%	[0.00]	mg/L

Bat	-39.5	0.18	0.45%	[0.00]	mg/L
Bet	-5348.9	76.89	1.44%	[0.00]	mg/L
Cat	379.5	2.73	0.72%	[0.00]	mg/L
Cdt	49.5	6.03	12.17%	[0.00]	mg/L
Cot	-65.1	1.13	1.74%	[0.00]	mg/L
Crt	297.1	13.96	4.70%	[0.00]	mg/L
Cut	2167.2	42.06	1.94%	[0.00]	mg/L
Fet	-12.7	2.66	20.96%	[0.00]	mg/L
Kt	-104.4	26.54	25.43%	[0.00]	mg/L
Mgt	-9.8	1.38	14.01%	[0.00]	mg/L
Mnt	199.4	6.26	3.14%	[0.00]	mg/L
Mot	18.7	1.16	6.21%	[0.00]	mg/L
Nat	-606.2	28.83	4.76%	[0.00]	mg/L
Nit	-62.3	2.71	4.35%	[0.00]	mg/L
Pbt	-22.9	6.86	29.95%	[0.00]	mg/L
Sbt	5.7	3.42	59.56%	[0.00]	mg/L
Set	-12.7	0.19	1.48%	[0.00]	mg/L
Tlt	-20.8	3.95	18.97%	[0.00]	mg/L
Vt	126.3	32.57	25.78%	[0.00]	mg/L
Znt	56.6	1.15	2.02%	[0.00]	mg/L
Alxt	298.3	47.71	16.00%	[0.00]	ug/L
Bext	-5348.9	76.89	1.44%	[0.00]	ug/L

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

Autosampler Location: 15
Date Collected: 7/19/2007 12:01:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Standard 2

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: Standard 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sca	336989.7	4006.45	1.19%	90.8	%
Yr	166130.6	3565.53	2.15%	95.9	%
Agt	473114.5	3169.61	0.67%	[2]	mg/L
Alt	33103.8	757.94	2.29%	[10]	mg/L
Ast	18379.4	97.23	0.53%	[10]	mg/L
B_t	140962.1	988.60	0.70%	[5.02]	mg/L
Bat	658364.7	5897.33	0.90%	[10]	mg/L
Bet	10712765.2	78435.21	0.73%	[4.01]	mg/L
Cat	538135.7	911.51	0.17%	[100]	mg/L
Cdt	121249.7	1096.32	0.90%	[5.01]	mg/L
Cot	236145.4	1860.02	0.79%	[10]	mg/L
Crt	695900.3	5275.12	0.76%	[9.97]	mg/L
Cut	3273366.3	25781.57	0.79%	[10]	mg/L
Fet	7943.2	172.82	2.18%	[9.98]	mg/L
Kt	92507.6	2766.18	2.99%	[100]	mg/L
Mgt	246667.5	997.84	0.40%	[100]	mg/L
Mnt	5141880.6	39552.17	0.77%	[10]	mg/L
Mot	116898.3	1133.01	0.97%	[9.98]	mg/L
Nat	250600.2	680.19	0.27%	[100]	mg/L
Nit	202034.8	1864.33	0.92%	[10]	mg/L
Pbt	43703.8	19.79	0.05%	[10]	mg/L
Sbt	18121.5	40.82	0.23%	[10]	mg/L
Set	11901.9	11.83	0.10%	[10]	mg/L
Tlt	25577.5	9.88	0.04%	[10]	mg/L
Vt	1480639.9	10839.85	0.73%	[10]	mg/L
Znt	438383.9	3462.19	0.79%	[10]	mg/L
Alxt	808877.7	5199.10	0.64%	[10000]	ug/L
Bext	10712765.2	78435.21	0.73%	[4010]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag	1	Lin, Calc Int	0.0	236600	0.00000	1.000000	
Al	1	Lin, Calc Int	0.0	3310	0.00000	1.000000	
As	1	Lin, Calc Int	0.0	1838	0.00000	1.000000	
B_	1	Lin, Calc Int	0.0	28080	0.00000	1.000000	
Ba	1	Lin, Calc Int	0.0	65840	0.00000	1.000000	
Be	1	Lin, Calc Int	0.0	2672000	0.00000	1.000000	
Ca	1	Lin, Calc Int	0.0	5381	0.00000	1.000000	
Cd	1	Lin, Calc Int	0.0	24200	0.00000	1.000000	
Co	1	Lin, Calc Int	0.0	23610	0.00000	1.000000	
Cr	1	Lin, Calc Int	0.0	69800	0.00000	1.000000	
Cu	1	Lin, Calc Int	0.0	327300	0.00000	1.000000	
Fe	1	Lin, Calc Int	0.0	795.9	0.00000	1.000000	
K	1	Lin, Calc Int	0.0	925.1	0.00000	1.000000	
Mg	1	Lin, Calc Int	-0.0	2467	0.00000	1.000000	
Mn	1	Lin, Calc Int	0.0	514200	0.00000	1.000000	
Mo	1	Lin, Calc Int	0.0	11710	0.00000	1.000000	
Na	1	Lin, Calc Int	0.0	2506	0.00000	1.000000	
Ni	1	Lin, Calc Int	0.0	20200	0.00000	1.000000	
Pb	1	Lin, Calc Int	-0.0	4370	0.00000	1.000000	
Sb	1	Lin, Calc Int	-0.0	1812	0.00000	1.000000	
Se	1	Lin, Calc Int	0.0	1190	0.00000	1.000000	

Tl	1	Lin, Calc Int	0.0	2558	0.00000	1.000000
V	1	Lin, Calc Int	0.0	148100	0.00000	1.000000
Zn	1	Lin, Calc Int	0.0	43840	0.00000	1.000000
Alx	1	Lin, Calc Int	0.0	80.89	0.00000	1.000000
Bex	1	Lin, Calc Int	0.0	2672	0.00000	1.000000

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

Autosampler Location: 15
Date Collected: 7/19/2007 12:04:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	333639.2	89.9	%	0.30				0.33%
Yr	164168.0	94.7	%	0.72				0.76%
Ag†	477380.1	2.02	mg/L	0.001	2.02	mg/L	0.001	0.05%
QC value within limits for Ag		Recovery = 100.90%						
Al†	33555.7	10.1	mg/L	0.14	10.1	mg/L	0.14	1.34%
QC value within limits for Al		Recovery = 101.37%						
As†	18473.8	10.1	mg/L	0.03	10.1	mg/L	0.03	0.33%
QC value within limits for As		Recovery = 100.51%						
B_†	142656.9	5.06	mg/L	0.018	5.06	mg/L	0.018	0.36%
QC value within limits for B_		Recovery = 101.20%						
Ba†	662211.5	10.1	mg/L	0.01	10.1	mg/L	0.01	0.09%
QC value within limits for Ba		Recovery = 100.58%						
Be†	10787300.8	4.04	mg/L	0.006	4.04	mg/L	0.006	0.14%
QC value within limits for Be		Recovery = 100.95%						
Ca†	539745.4	100	mg/L	0.1	100	mg/L	0.1	0.08%
QC value within limits for Ca		Recovery = 100.30%						
Cd†	122091.0	4.91	mg/L	0.002	4.91	mg/L	0.002	0.05%
QC value within limits for Cd		Recovery = 98.18%						
Co†	238136.7	10.1	mg/L	0.03	10.1	mg/L	0.03	0.33%
QC value within limits for Co		Recovery = 100.84%						
Cr†	701898.6	10.1	mg/L	0.04	10.1	mg/L	0.04	0.42%
QC value within limits for Cr		Recovery = 100.56%						
Cu†	3308816.4	10.1	mg/L	0.02	10.1	mg/L	0.02	0.15%
QC value within limits for Cu		Recovery = 101.18%						
Fe†	8049.8	10.1	mg/L	0.17	10.1	mg/L	0.17	1.64%
QC value within limits for Fe		Recovery = 101.14%						
K†	93328.8	101	mg/L	1.3	101	mg/L	1.3	1.33%
QC value within limits for K		Recovery = 100.89%						
Mg†	248349.1	101	mg/L	0.3	101	mg/L	0.3	0.27%
QC value within limits for Mg		Recovery = 100.68%						
Mn†	5180071.2	10.1	mg/L	0.01	10.1	mg/L	0.01	0.12%
QC value within limits for Mn		Recovery = 100.74%						
Mo†	118022.4	10.1	mg/L	0.02	10.1	mg/L	0.02	0.18%
QC value within limits for Mo		Recovery = 100.76%						
Na†	252941.7	101	mg/L	0.4	101	mg/L	0.4	0.39%
QC value within limits for Na		Recovery = 100.93%						
Ni†	203682.0	10.1	mg/L	0.03	10.1	mg/L	0.03	0.29%
QC value within limits for Ni		Recovery = 100.82%						
Pb†	43977.9	10.1	mg/L	0.02	10.1	mg/L	0.02	0.19%
QC value within limits for Pb		Recovery = 100.63%						
Sb†	18193.8	9.88	mg/L	0.012	9.88	mg/L	0.012	0.12%
QC value within limits for Sb		Recovery = 98.81%						
Se†	11888.9	10.0	mg/L	0.01	10.0	mg/L	0.01	0.06%
QC value within limits for Se		Recovery = 100.09%						
Tl†	25532.4	10.0	mg/L	0.01	10.0	mg/L	0.01	0.08%
QC value within limits for Tl		Recovery = 100.11%						
V†	1494309.3	10.1	mg/L	0.03	10.1	mg/L	0.03	0.31%
QC value within limits for V		Recovery = 101.48%						
Zn†	442766.9	10.0	mg/L	0.01	10.0	mg/L	0.01	0.08%
QC value within limits for Zn		Recovery = 100.31%						
Alx†	816974.9	10100	ug/L	29.4	10.1	mg/L	0.03	0.29%
QC value within limits for Alx		Recovery = 101.00%						
Bex†	10787300.8	4040	ug/L	5.5	4.04	mg/L	0.006	0.14%
QC value within limits for Bex		Recovery = 100.95%						

All analyte(s) passed QC.

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

Autosampler Location: 9
Date Collected: 7/19/2007 12:08:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LINEARITY

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: LINEARITY

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	318918.4	85.9	%	0.33				0.38%
Yr	156000.0	90.0	%	0.26				0.29%
Ag†	-8505.9	-0.0360	mg/L	0.00033	-0.0360	mg/L	0.00033	0.93%
QC value within limits for Ag		Recovery = Not calculated						
Al†	-24.4	-0.00737	mg/L	0.006636	-0.00737	mg/L	0.006636	90.09%
QC value within limits for Al		Recovery = Not calculated						
As†	-183.4	-0.0395	mg/L	0.00213	-0.0395	mg/L	0.00213	5.40%
QC value within limits for As		Recovery = Not calculated						
B_†	521.0	0.0186	mg/L	0.00324	0.0186	mg/L	0.00324	17.44%
QC value within limits for B_		Recovery = Not calculated						
Ba†	93.3	0.00142	mg/L	0.000044	0.00142	mg/L	0.000044	3.13%
QC value within limits for Ba		Recovery = Not calculated						
Be†	-1023.9	-0.00038	mg/L	0.000017	-0.00038	mg/L	0.000017	4.48%
QC value within limits for Be		Recovery = Not calculated						
Ca†	1608478.3	299	mg/L	3.8	299	mg/L	3.8	1.27%
QC value within limits for Ca		Recovery = 99.63%						
Cd†	-34.6	0.00032	mg/L	0.000304	0.00032	mg/L	0.000304	96.14%
QC value within limits for Cd		Recovery = Not calculated						
Co†	49.7	0.00211	mg/L	0.000522	0.00211	mg/L	0.000522	24.78%
QC value within limits for Co		Recovery = Not calculated						
Cr†	116.2	0.00166	mg/L	0.000216	0.00166	mg/L	0.000216	12.97%
QC value within limits for Cr		Recovery = Not calculated						
Cu†	-3947.2	-0.0121	mg/L	0.00022	-0.0121	mg/L	0.00022	1.82%
QC value within limits for Cu		Recovery = Not calculated						
Fe†	79527.9	99.9	mg/L	0.45	99.9	mg/L	0.45	0.45%
QC value within limits for Fe		Recovery = 99.92%						
K†	286059.9	309	mg/L	2.7	309	mg/L	2.7	0.88%
QC value within limits for K		Recovery = 103.08%						
Mg†	479220.4	194	mg/L	0.3	194	mg/L	0.3	0.18%
QC value within limits for Mg		Recovery = Not calculated						
Mn†	1522.4	0.00296	mg/L	0.000095	0.00296	mg/L	0.000095	3.22%
QC value within limits for Mn		Recovery = Not calculated						
Mo†	2.1	0.00018	mg/L	0.000278	0.00018	mg/L	0.000278	155.11%
QC value within limits for Mo		Recovery = Not calculated						
Na†	774488.1	309	mg/L	3.0	309	mg/L	3.0	0.95%
QC value within limits for Na		Recovery = 103.02%						
Ni†	-14.2	-0.00070	mg/L	0.000561	-0.00070	mg/L	0.000561	79.94%
QC value within limits for Ni		Recovery = Not calculated						
Pb†	-15.2	-0.00349	mg/L	0.001138	-0.00349	mg/L	0.001138	32.63%
QC value within limits for Pb		Recovery = Not calculated						
Sb†	30.5	0.0168	mg/L	0.00415	0.0168	mg/L	0.00415	24.72%
QC value within limits for Sb		Recovery = Not calculated						
Se†	-250.5	-0.0160	mg/L	0.00540	-0.0160	mg/L	0.00540	33.79%
QC value within limits for Se		Recovery = Not calculated						
Tl†	76.9	0.0301	mg/L	0.00514	0.0301	mg/L	0.00514	17.09%
QC value within limits for Tl		Recovery = Not calculated						
V†	-327.1	-0.00220	mg/L	0.000300	-0.00220	mg/L	0.000300	13.66%
QC value within limits for V		Recovery = Not calculated						
Zn†	929.1	0.0212	mg/L	0.00008	0.0212	mg/L	0.00008	0.39%
QC value within limits for Zn		Recovery = Not calculated						
Alx†	314.8	3.89	ug/L	1.760	0.00389	mg/L	0.001760	45.21%
QC value within limits for Alx		Recovery = Not calculated						
Bex†	-1023.9	-0.383	ug/L	0.0172	-0.00038	mg/L	0.000017	4.48%
QC value within limits for Bex		Recovery = Not calculated						

All analyte(s) passed QC.

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

Autosampler Location: 10
Date Collected: 7/19/2007 12:11:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	326608.5	88.0	%	0.12				0.14%
Yr	160338.5	92.5	%	0.44				0.48%
Ag†	-8623.0	-0.0365	mg/L	0.00051	-0.0365	mg/L	0.00051	1.40%
QC value within limits for Ag	Recovery = Not calculated							
Al†	819727.2	248	mg/L	1.4	248	mg/L	1.4	0.58%
QC value within limits for Al	Recovery = 99.05%							
As†	-400.1	-0.158	mg/L	0.0021	-0.158	mg/L	0.0021	1.32%
QC value within limits for As	Recovery = Not calculated							
B_†	1992.2	0.0709	mg/L	0.00198	0.0709	mg/L	0.00198	2.80%
QC value within limits for B_	Recovery = Not calculated							
Ba†	135.8	0.00206	mg/L	0.000018	0.00206	mg/L	0.000018	0.87%
QC value within limits for Ba	Recovery = Not calculated							
Be†	-780.6	-0.00029	mg/L	0.000007	-0.00029	mg/L	0.000007	2.39%
QC value within limits for Be	Recovery = Not calculated							
Ca†	1356909.3	252	mg/L	1.9	252	mg/L	1.9	0.74%
QC value within limits for Ca	Recovery = 100.86%							
Cd†	-46.4	0.00188	mg/L	0.000100	0.00188	mg/L	0.000100	5.32%
QC value within limits for Cd	Recovery = Not calculated							
Co†	36.4	0.00154	mg/L	0.000056	0.00154	mg/L	0.000056	3.63%
QC value within limits for Co	Recovery = Not calculated							
Cr†	-15.9	-0.00023	mg/L	0.000401	-0.00023	mg/L	0.000401	176.39%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	-4253.5	-0.0130	mg/L	0.00011	-0.0130	mg/L	0.00011	0.84%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	79340.7	99.7	mg/L	0.11	99.7	mg/L	0.11	0.11%
QC value within limits for Fe	Recovery = 99.68%							
K†	198.2	0.214	mg/L	0.0165	0.214	mg/L	0.0165	7.72%
QC value within limits for K	Recovery = Not calculated							
Mg†	600796.8	244	mg/L	1.9	244	mg/L	1.9	0.76%
QC value within limits for Mg	Recovery = 97.43%							
Mn†	1243.1	0.00242	mg/L	0.000080	0.00242	mg/L	0.000080	3.30%
QC value within limits for Mn	Recovery = Not calculated							
Mo†	-2.9	-0.00024	mg/L	0.000364	-0.00024	mg/L	0.000364	149.33%
QC value within limits for Mo	Recovery = Not calculated							
Na†	295.8	0.118	mg/L	0.0115	0.118	mg/L	0.0115	9.72%
QC value within limits for Na	Recovery = Not calculated							
Ni†	-18.9	-0.00094	mg/L	0.000343	-0.00094	mg/L	0.000343	36.68%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	-164.3	-0.0376	mg/L	0.00239	-0.0376	mg/L	0.00239	6.37%
QC value within limits for Pb	Recovery = Not calculated							
Sb†	24.8	0.0137	mg/L	0.00454	0.0137	mg/L	0.00454	33.25%
QC value within limits for Sb	Recovery = Not calculated							
Se†	-283.5	-0.0442	mg/L	0.00468	-0.0442	mg/L	0.00468	10.59%
QC value within limits for Se	Recovery = Not calculated							
Tl†	57.9	0.0226	mg/L	0.00168	0.0226	mg/L	0.00168	7.43%
QC value within limits for Tl	Recovery = Not calculated							
V†	-344.7	-0.00233	mg/L	0.000072	-0.00233	mg/L	0.000072	3.11%
QC value within limits for V	Recovery = Not calculated							
Zn†	765.6	0.0175	mg/L	0.00012	0.0175	mg/L	0.00012	0.71%
QC value within limits for Zn	Recovery = Not calculated							
Alx†	Saturated2							
Unable to evaluate QC.								
Bex†	-780.6	-0.292	ug/L	0.0070	-0.00029	mg/L	0.000007	2.39%
QC value within limits for Bex	Recovery = Not calculated							

All analyte(s) passed QC. One or more analytes were not evaluated.

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

Autosampler Location: 11
Date Collected: 7/19/2007 12:15:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	332941.3	89.7	%	0.30				0.34%
Yr	163727.0	94.5	%	0.71				0.75%
Agt	-305.1	-0.00129	mg/L	0.000093	-0.00129	mg/L	0.000093	7.19%
QC value less than the lower limit for Ag Recovery = -0.26%								
Alt	803439.3	243	mg/L	4.6	243	mg/L	4.6	1.89%
QC value within limits for Al Recovery = 97.08%								
Ast	-403.1	-0.160	mg/L	0.0106	-0.160	mg/L	0.0106	6.59%
QC value less than the lower limit for As Recovery = Not calculated								
B_t	1907.4	0.0675	mg/L	0.00005	0.0675	mg/L	0.00005	0.07%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Bat	16718.3	0.254	mg/L	0.0008	0.254	mg/L	0.0008	0.33%
QC value within limits for Ba Recovery = 101.57%								
Bet	651182.1	0.244	mg/L	0.0008	0.244	mg/L	0.0008	0.33%
QC value within limits for Be Recovery = 97.50%								
Cat	1334663.9	248	mg/L	4.5	248	mg/L	4.5	1.83%
QC value within limits for Ca Recovery = 99.21%								
Cdt	11858.5	0.495	mg/L	0.0018	0.495	mg/L	0.0018	0.36%
QC value within limits for Cd Recovery = 98.94%								
Cot	5571.1	0.236	mg/L	0.0003	0.236	mg/L	0.0003	0.11%
QC value within limits for Co Recovery = 94.37%								
Crt	16983.9	0.243	mg/L	0.0005	0.243	mg/L	0.0005	0.22%
QC value within limits for Cr Recovery = 97.33%								
Cut	79122.2	0.242	mg/L	0.0001	0.242	mg/L	0.0001	0.05%
QC value within limits for Cu Recovery = 96.78%								
Fet	77997.5	98.0	mg/L	0.28	98.0	mg/L	0.28	0.28%
QC value within limits for Fe Recovery = 98.00%								
Kt	102.4	0.111	mg/L	0.0171	0.111	mg/L	0.0171	15.46%
QC value within limits for K Recovery = Not calculated								
Mgt	589747.1	239	mg/L	4.7	239	mg/L	4.7	1.96%
QC value within limits for Mg Recovery = 95.63%								
Mnt	129682.7	0.252	mg/L	0.0018	0.252	mg/L	0.0018	0.72%
QC value within limits for Mn Recovery = 100.88%								
Mot	3.2	0.00028	mg/L	0.000930	0.00028	mg/L	0.000930	336.69%
QC value within limits for Mo Recovery = Not calculated								
Nat	173.4	0.0692	mg/L	0.00449	0.0692	mg/L	0.00449	6.49%
QC value within limits for Na Recovery = Not calculated								
Nit	9274.5	0.459	mg/L	0.0022	0.459	mg/L	0.0022	0.47%
QC value within limits for Ni Recovery = 91.81%								
Pbt	1972.6	0.451	mg/L	0.0037	0.451	mg/L	0.0037	0.82%
QC value within limits for Pb Recovery = 90.27%								
Sbt	33.8	0.0148	mg/L	0.00199	0.0148	mg/L	0.00199	13.45%
QC value within limits for Sb Recovery = Not calculated								
Set	-274.8	-0.0402	mg/L	0.01434	-0.0402	mg/L	0.01434	35.70%
QC value within limits for Se Recovery = Not calculated								
Tlt	46.7	0.0189	mg/L	0.00743	0.0189	mg/L	0.00743	39.25%
QC value within limits for Tl Recovery = Not calculated								
Vt	36047.8	0.245	mg/L	0.0012	0.245	mg/L	0.0012	0.49%
QC value within limits for V Recovery = 97.92%								
Znt	23077.4	0.523	mg/L	0.0015	0.523	mg/L	0.0015	0.28%
QC value within limits for Zn Recovery = 104.66%								
Alxt	Saturated2							
Unable to evaluate QC.								
Bext	651182.1	244	ug/L	0.8	0.244	mg/L	0.0008	0.33%
QC value within limits for Bex Recovery = 97.50%								

QC Failed. Continue with analysis.

Sequence No.: 7
Sample ID: Wash
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 0
Date Collected: 7/19/2007 12:19:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Wash

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: Wash

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	348075.5	93.7	%	0.44				0.47%
Yr	168176.5	97.1	%	0.40				0.41%
Ag†	306.4	0.00130	mg/L	0.000161	0.00130	mg/L	0.000161	12.43%
QC value within limits for Ag	Recovery = Not calculated							
Al†	-3.9	-0.00117	mg/L	0.011831	-0.00117	mg/L	0.011831	>999.9%
QC value within limits for Al	Recovery = Not calculated							
As†	0.7	0.00038	mg/L	0.001519	0.00038	mg/L	0.001519	398.67%
QC value within limits for As	Recovery = Not calculated							
B_†	128.7	0.00458	mg/L	0.000178	0.00458	mg/L	0.000178	3.88%
QC value within limits for B_	Recovery = Not calculated							
Ba†	-0.4	-0.00001	mg/L	0.000044	-0.00001	mg/L	0.000044	706.74%
QC value within limits for Ba	Recovery = Not calculated							
Be†	21.3	0.00001	mg/L	0.000007	0.00001	mg/L	0.000007	89.91%
QC value within limits for Be	Recovery = Not calculated							
Ca†	-1.5	-0.00029	mg/L	0.000619	-0.00029	mg/L	0.000619	216.71%
QC value within limits for Ca	Recovery = Not calculated							
Cd†	1.9	0.00007	mg/L	0.000349	0.00007	mg/L	0.000349	493.49%
QC value within limits for Cd	Recovery = Not calculated							
Co†	1.0	0.00004	mg/L	0.000113	0.00004	mg/L	0.000113	262.67%
QC value within limits for Co	Recovery = Not calculated							
Cr†	13.7	0.00020	mg/L	0.000187	0.00020	mg/L	0.000187	95.52%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	164.1	0.00050	mg/L	0.000107	0.00050	mg/L	0.000107	21.37%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	4.5	0.00571	mg/L	0.000867	0.00571	mg/L	0.000867	15.19%
QC value within limits for Fe	Recovery = Not calculated							
K†	120.9	0.131	mg/L	0.0404	0.131	mg/L	0.0404	30.92%
QC value within limits for K	Recovery = Not calculated							
Mg†	3.8	0.00154	mg/L	0.001491	0.00154	mg/L	0.001491	96.68%
QC value within limits for Mg	Recovery = Not calculated							
Mn†	-51.1	-0.00010	mg/L	0.000020	-0.00010	mg/L	0.000020	20.14%
QC value within limits for Mn	Recovery = Not calculated							
Mo†	3.5	0.00030	mg/L	0.000051	0.00030	mg/L	0.000051	17.24%
QC value within limits for Mo	Recovery = Not calculated							
Na†	67.0	0.0267	mg/L	0.01141	0.0267	mg/L	0.01141	42.71%
QC value within limits for Na	Recovery = Not calculated							
Ni†	1.2	0.00006	mg/L	0.000311	0.00006	mg/L	0.000311	514.80%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	-1.9	-0.00043	mg/L	0.001035	-0.00043	mg/L	0.001035	239.45%
QC value within limits for Pb	Recovery = Not calculated							
Sb†	-0.1	-0.00005	mg/L	0.002455	-0.00005	mg/L	0.002455	>999.9%
QC value within limits for Sb	Recovery = Not calculated							
Se†	7.1	0.00600	mg/L	0.000413	0.00600	mg/L	0.000413	6.89%
QC value within limits for Se	Recovery = Not calculated							
Tl†	-2.1	-0.00084	mg/L	0.000781	-0.00084	mg/L	0.000781	93.03%
QC value within limits for Tl	Recovery = Not calculated							
V†	27.8	0.00019	mg/L	0.000349	0.00019	mg/L	0.000349	184.95%
QC value within limits for V	Recovery = Not calculated							
Zn†	28.1	0.00064	mg/L	0.000045	0.00064	mg/L	0.000045	6.98%
QC value within limits for Zn	Recovery = Not calculated							
Alx†	78.2	0.967	ug/L	0.5958	0.00097	mg/L	0.000596	61.60%
QC value within limits for Alx	Recovery = Not calculated							
Bex†	21.3	0.00798	ug/L	0.007176	0.00001	mg/L	0.000007	89.91%
QC value within limits for Bex	Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 8
Sample ID: QC-25 1ppm
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 7/19/2007 12:22:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: QC-25 1ppm

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: QC-25 1ppm

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	372487.2	100	%	1.0				0.99%
Yr	175661.2	101	%	1.0				0.94%
Ag†	232257.6	0.982	mg/L	0.0005	0.982	mg/L	0.0005	0.05%
QC value within limits for Ag		Recovery = 98.18%						
Al†	3253.7	0.983	mg/L	0.0137	0.983	mg/L	0.0137	1.39%
QC value within limits for Al		Recovery = 98.29%						
As†	1727.7	0.940	mg/L	0.0119	0.940	mg/L	0.0119	1.27%
QC value within limits for As		Recovery = 93.99%						
B_†	25921.7	0.921	mg/L	0.0016	0.921	mg/L	0.0016	0.17%
QC value within limits for B_		Recovery = 92.11%						
Ba†	67738.1	1.03	mg/L	0.003	1.03	mg/L	0.003	0.31%
QC value within limits for Ba		Recovery = 102.89%						
Be†	2516198.4	0.942	mg/L	0.0021	0.942	mg/L	0.0021	0.22%
QC value within limits for Be		Recovery = 94.19%						
Ca†	5442.7	1.01	mg/L	0.007	1.01	mg/L	0.007	0.74%
QC value within limits for Ca		Recovery = 101.14%						
Cd†	23175.3	0.945	mg/L	0.0034	0.945	mg/L	0.0034	0.36%
QC value within limits for Cd		Recovery = 94.52%						
Co†	24245.9	1.03	mg/L	0.005	1.03	mg/L	0.005	0.52%
QC value within limits for Co		Recovery = 102.67%						
Cr†	68087.4	0.975	mg/L	0.0027	0.975	mg/L	0.0027	0.28%
QC value within limits for Cr		Recovery = 97.55%						
Cu†	321473.8	0.983	mg/L	0.0005	0.983	mg/L	0.0005	0.06%
QC value within limits for Cu		Recovery = 98.31%						
Fe†	811.1	1.02	mg/L	0.008	1.02	mg/L	0.008	0.74%
QC value within limits for Fe		Recovery = 101.91%						
K†	8742.6	9.45	mg/L	0.128	9.45	mg/L	0.128	1.35%
QC value within limits for K		Recovery = 94.51%						
Mg†	2581.5	1.05	mg/L	0.004	1.05	mg/L	0.004	0.40%
QC value within limits for Mg		Recovery = 104.66%						
Mn†	523013.4	1.02	mg/L	0.003	1.02	mg/L	0.003	0.30%
QC value within limits for Mn		Recovery = 101.72%						
Mo†	11097.3	0.947	mg/L	0.0142	0.947	mg/L	0.0142	1.50%
QC value within limits for Mo		Recovery = 94.74%						
Na†	2648.8	1.06	mg/L	0.012	1.06	mg/L	0.012	1.15%
QC value within limits for Na		Recovery = 105.70%						
Ni†	20790.3	1.03	mg/L	0.003	1.03	mg/L	0.003	0.33%
QC value within limits for Ni		Recovery = 102.90%						
Pb†	4506.6	1.03	mg/L	0.017	1.03	mg/L	0.017	1.63%
QC value within limits for Pb		Recovery = 103.12%						
Sb†	1708.8	0.927	mg/L	0.0172	0.927	mg/L	0.0172	1.85%
QC value within limits for Sb		Recovery = 92.73%						
Se†	1094.4	0.922	mg/L	0.0086	0.922	mg/L	0.0086	0.93%
QC value within limits for Se		Recovery = 92.15%						
Tl†	2629.0	1.03	mg/L	0.016	1.03	mg/L	0.016	1.60%
QC value within limits for Tl		Recovery = 103.05%						
V†	139666.6	0.949	mg/L	0.0011	0.949	mg/L	0.0011	0.12%
QC value within limits for V		Recovery = 94.87%						
Zn†	43683.4	0.989	mg/L	0.0011	0.989	mg/L	0.0011	0.11%
QC value within limits for Zn		Recovery = 98.95%						
Alx†	75250.0	930	ug/L	0.6	0.930	mg/L	0.0006	0.06%
QC value within limits for Alx		Recovery = 93.03%						
Bex†	2516198.4	942	ug/L	2.1	0.942	mg/L	0.0021	0.22%
QC value within limits for Bex		Recovery = 94.19%						

All analyte(s) passed QC.

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

Autosampler Location: 4
Date Collected: 7/19/2007 12:27:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	350495.7	94.4	%	1.07				1.13%
Yr	165843.1	95.7	%	0.48				0.50%
Ag†	198280.7	0.838	mg/L	0.0011	0.838	mg/L	0.0011	0.13%
QC value within limits for Ag		Recovery = 83.82%						
Al†	17004.7	5.14	mg/L	0.013	5.14	mg/L	0.013	0.25%
QC value within limits for Al		Recovery = 102.74%						
As†	8590.5	4.67	mg/L	0.016	4.67	mg/L	0.016	0.34%
QC value within limits for As		Recovery = 93.48%						
B_†	69113.8	2.45	mg/L	0.006	2.45	mg/L	0.006	0.25%
QC value within limits for B_		Recovery = 98.05%						
Ba†	329345.0	5.00	mg/L	0.003	5.00	mg/L	0.003	0.07%
QC value within limits for Ba		Recovery = 100.05%						
Be†	5367147.2	2.01	mg/L	0.017	2.01	mg/L	0.017	0.82%
QC value within limits for Be		Recovery = 100.45%						
Ca†	272442.3	50.6	mg/L	0.11	50.6	mg/L	0.11	0.22%
QC value within limits for Ca		Recovery = 101.25%						
Cd†	60457.1	2.44	mg/L	0.002	2.44	mg/L	0.002	0.08%
QC value within limits for Cd		Recovery = 97.45%						
Co†	118781.3	5.03	mg/L	0.005	5.03	mg/L	0.005	0.10%
QC value within limits for Co		Recovery = 100.60%						
Cr†	346690.4	4.97	mg/L	0.011	4.97	mg/L	0.011	0.21%
QC value within limits for Cr		Recovery = 99.34%						
Cu†	1627031.4	4.98	mg/L	0.021	4.98	mg/L	0.021	0.43%
QC value within limits for Cu		Recovery = 99.51%						
Fe†	4145.1	5.21	mg/L	0.004	5.21	mg/L	0.004	0.08%
QC value within limits for Fe		Recovery = 104.16%						
K†	45310.1	49.0	mg/L	0.10	49.0	mg/L	0.10	0.21%
QC value within limits for K		Recovery = 97.96%						
Mg†	126566.1	51.3	mg/L	0.14	51.3	mg/L	0.14	0.28%
QC value within limits for Mg		Recovery = 102.62%						
Mn†	2574028.8	5.01	mg/L	0.004	5.01	mg/L	0.004	0.07%
QC value within limits for Mn		Recovery = 100.12%						
Mo†	58285.2	4.98	mg/L	0.007	4.98	mg/L	0.007	0.14%
QC value within limits for Mo		Recovery = 99.52%						
Na†	128353.5	51.2	mg/L	0.10	51.2	mg/L	0.10	0.20%
QC value within limits for Na		Recovery = 102.44%						
Ni†	102507.7	5.07	mg/L	0.011	5.07	mg/L	0.011	0.21%
QC value within limits for Ni		Recovery = 101.48%						
Pb†	21996.5	5.03	mg/L	0.029	5.03	mg/L	0.029	0.57%
QC value within limits for Pb		Recovery = 100.66%						
Sb†	8711.9	4.73	mg/L	0.013	4.73	mg/L	0.013	0.29%
QC value within limits for Sb		Recovery = 94.57%						
Se†	5938.7	5.00	mg/L	0.018	5.00	mg/L	0.018	0.37%
QC value within limits for Se		Recovery = 100.00%						
Tl†	13147.0	5.15	mg/L	0.019	5.15	mg/L	0.019	0.38%
QC value within limits for Tl		Recovery = 103.08%						
V†	733644.2	4.98	mg/L	0.003	4.98	mg/L	0.003	0.05%
QC value within limits for V		Recovery = 99.65%						
Zn†	222958.6	5.05	mg/L	0.006	5.05	mg/L	0.006	0.12%
QC value within limits for Zn		Recovery = 101.03%						
Alx†	400415.9	4950	ug/L	5.7	4.95	mg/L	0.006	0.11%
QC value within limits for Alx		Recovery = 99.01%						
Bex†	5367147.2	2010	ug/L	16.5	2.01	mg/L	0.017	0.82%
QC value within limits for Bex		Recovery = 100.45%						

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: ICB
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 0
Date Collected: 7/19/2007 12:31:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	359558.2	96.8	%	0.74				0.76%
Yr	174919.5	101	%	0.5				0.54%
Ag†	215.5	0.00091	mg/L	0.000428	0.00091	mg/L	0.000428	47.02%
QC value within limits for Ag	Recovery = Not calculated							
Al†	-51.8	-0.0156	mg/L	0.00013	-0.0156	mg/L	0.00013	0.81%
QC value within limits for Al	Recovery = Not calculated							
As†	37.0	0.0201	mg/L	0.00382	0.0201	mg/L	0.00382	18.98%
QC value within limits for As	Recovery = Not calculated							
B_†	423.5	0.0151	mg/L	0.00093	0.0151	mg/L	0.00093	6.13%
QC value within limits for B_	Recovery = Not calculated							
Ba†	1.1	0.00002	mg/L	0.000057	0.00002	mg/L	0.000057	348.04%
QC value within limits for Ba	Recovery = Not calculated							
Be†	-13.7	-0.00001	mg/L	0.000043	-0.00001	mg/L	0.000043	837.22%
QC value within limits for Be	Recovery = Not calculated							
Ca†	4.2	0.00079	mg/L	0.000595	0.00079	mg/L	0.000595	75.54%
QC value within limits for Ca	Recovery = Not calculated							
Cd†	11.1	0.00011	mg/L	0.000001	0.00011	mg/L	0.000001	0.96%
QC value within limits for Cd	Recovery = Not calculated							
Co†	0.0	0.00000	mg/L	0.000122	0.00000	mg/L	0.000122	>999.9%
QC value within limits for Co	Recovery = Not calculated							
Cr†	5.9	0.00008	mg/L	0.000160	0.00008	mg/L	0.000160	188.13%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	178.7	0.00055	mg/L	0.000284	0.00055	mg/L	0.000284	51.99%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	2.2	0.00279	mg/L	0.000765	0.00279	mg/L	0.000765	27.39%
QC value within limits for Fe	Recovery = Not calculated							
K†	59.7	0.0646	mg/L	0.02374	0.0646	mg/L	0.02374	36.76%
QC value within limits for K	Recovery = Not calculated							
Mg†	3.9	0.00157	mg/L	0.003412	0.00157	mg/L	0.003412	217.65%
QC value within limits for Mg	Recovery = Not calculated							
Mn†	8.7	0.00002	mg/L	0.000004	0.00002	mg/L	0.000004	22.03%
QC value within limits for Mn	Recovery = Not calculated							
Mo†	9.5	0.00081	mg/L	0.000228	0.00081	mg/L	0.000228	28.12%
QC value within limits for Mo	Recovery = Not calculated							
Na†	86.3	0.0345	mg/L	0.00934	0.0345	mg/L	0.00934	27.12%
QC value within limits for Na	Recovery = Not calculated							
Ni†	0.0	0.00000	mg/L	0.000222	0.00000	mg/L	0.000222	>999.9%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	5.3	0.00122	mg/L	0.000567	0.00122	mg/L	0.000567	46.67%
QC value within limits for Pb	Recovery = Not calculated							
Sb†	18.7	0.0103	mg/L	0.00266	0.0103	mg/L	0.00266	25.78%
QC value within limits for Sb	Recovery = Not calculated							
Se†	14.1	0.0119	mg/L	0.00114	0.0119	mg/L	0.00114	9.58%
QC value within limits for Se	Recovery = Not calculated							
Tl†	6.9	0.00269	mg/L	0.000856	0.00269	mg/L	0.000856	31.82%
QC value within limits for Tl	Recovery = Not calculated							
V†	27.0	0.00018	mg/L	0.000180	0.00018	mg/L	0.000180	98.42%
QC value within limits for V	Recovery = Not calculated							
Zn†	37.8	0.00086	mg/L	0.000020	0.00086	mg/L	0.000020	2.30%
QC value within limits for Zn	Recovery = Not calculated							
Alx†	108.7	1.34	ug/L	0.259	0.00134	mg/L	0.000259	19.29%
QC value within limits for Alx	Recovery = Not calculated							
Bex†	-13.7	-0.00512	ug/L	0.042905	-0.00001	mg/L	0.000043	837.22%
QC value within limits for Bex	Recovery = Not calculated							

All analyte(s) passed QC.

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

Autosampler Location: 20
Date Collected: 7/19/2007 12:34:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MRL

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	363829.0	98.0	%	0.04				0.04%
Yr	175686.6	101	%	0.0				0.01%
Ag†	2436.6	0.0103	mg/L	0.00020	0.0103	mg/L	0.00020	1.95%
QC value within limits for Ag		Recovery = 103.00%						
Al†	179.2	0.0541	mg/L	0.00699	0.0541	mg/L	0.00699	12.91%
QC value within limits for Al		Recovery = 108.28%						
As†	186.2	0.101	mg/L	0.0034	0.101	mg/L	0.0034	3.33%
QC value within limits for As		Recovery = 101.33%						
B_†	1625.4	0.0578	mg/L	0.00007	0.0578	mg/L	0.00007	0.12%
QC value within limits for B_		Recovery = 115.56%						
Ba†	1360.8	0.0207	mg/L	0.00008	0.0207	mg/L	0.00008	0.36%
QC value within limits for Ba		Recovery = 103.35%						
Be†	2766.1	0.00104	mg/L	0.000017	0.00104	mg/L	0.000017	1.60%
QC value within limits for Be		Recovery = 103.54%						
Ca†	5543.9	1.03	mg/L	0.006	1.03	mg/L	0.006	0.57%
QC value within limits for Ca		Recovery = 103.02%						
Cd†	153.9	0.00480	mg/L	0.000148	0.00480	mg/L	0.000148	3.08%
QC value within limits for Cd		Recovery = 95.96%						
Co†	1237.0	0.0524	mg/L	0.00003	0.0524	mg/L	0.00003	0.06%
QC value within limits for Co		Recovery = 104.76%						
Cr†	708.9	0.0102	mg/L	0.00006	0.0102	mg/L	0.00006	0.60%
QC value within limits for Cr		Recovery = 101.57%						
Cu†	3420.9	0.0105	mg/L	0.00035	0.0105	mg/L	0.00035	3.34%
QC value within limits for Cu		Recovery = 105.00%						
Fe†	20.4	0.0257	mg/L	0.00393	0.0257	mg/L	0.00393	15.30%
QC value within limits for Fe		Recovery = 128.43%						
K†	966.0	1.04	mg/L	0.095	1.04	mg/L	0.095	9.06%
QC value within limits for K		Recovery = 104.43%						
Mg†	263.9	0.107	mg/L	0.0015	0.107	mg/L	0.0015	1.38%
QC value within limits for Mg		Recovery = 106.99%						
Mn†	1093.2	0.00213	mg/L	0.000001	0.00213	mg/L	0.000001	0.04%
QC value within limits for Mn		Recovery = 106.30%						
Mo†	240.9	0.0206	mg/L	0.00036	0.0206	mg/L	0.00036	1.75%
QC value within limits for Mo		Recovery = 102.85%						
Na†	2651.6	1.06	mg/L	0.018	1.06	mg/L	0.018	1.66%
QC value within limits for Na		Recovery = 105.81%						
Ni†	425.4	0.0211	mg/L	0.00005	0.0211	mg/L	0.00005	0.25%
QC value within limits for Ni		Recovery = 105.28%						
Pb†	94.7	0.0217	mg/L	0.00106	0.0217	mg/L	0.00106	4.88%
QC value within limits for Pb		Recovery = 108.37%						
Sb†	94.1	0.0517	mg/L	0.00186	0.0517	mg/L	0.00186	3.60%
QC value within limits for Sb		Recovery = 103.50%						
Se†	125.1	0.105	mg/L	0.0080	0.105	mg/L	0.0080	7.61%
QC value within limits for Se		Recovery = 105.19%						
Tl†	284.5	0.111	mg/L	0.0006	0.111	mg/L	0.0006	0.53%
QC value within limits for Tl		Recovery = 111.25%						
V†	337.9	0.00234	mg/L	0.000073	0.00234	mg/L	0.000073	3.13%
QC value within limits for V		Recovery = 116.91%						
Zn†	942.7	0.0214	mg/L	0.00014	0.0214	mg/L	0.00014	0.64%
QC value within limits for Zn		Recovery = 106.80%						
Alx†	3937.2	48.7	ug/L	0.36	0.0487	mg/L	0.00036	0.75%
QC value within limits for Alx		Recovery = 97.35%						
Bex†	2766.1	1.04	ug/L	0.017	0.00104	mg/L	0.000017	1.60%
QC value within limits for Bex		Recovery = 103.54%						

All analyte(s) passed QC.

Sequence No.: 12
Sample ID: FILTERCHECK
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 16
Date Collected: 7/19/2007 12:38:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: FILTERCHECK

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: FILTERCHECK

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	373411.2	101	%	2.9				2.91%
Yr	182332.5	105	%	6.5				6.13%
Agt	-81.3	-0.00034	mg/L	0.000244	-0.00034	mg/L	0.000244	71.10%
Alt	-45.3	-0.0137	mg/L	0.00138	-0.0137	mg/L	0.00138	10.06%
Ast	-1.8	-0.00097	mg/L	0.000095	-0.00097	mg/L	0.000095	9.83%
B_t	116.8	0.00416	mg/L	0.000170	0.00416	mg/L	0.000170	4.08%
Bat	7.1	0.00011	mg/L	0.000020	0.00011	mg/L	0.000020	19.00%
Bet	14.9	0.00001	mg/L	0.000013	0.00001	mg/L	0.000013	235.46%
Cat	-6.3	-0.00116	mg/L	0.000794	-0.00116	mg/L	0.000794	68.19%
Cdt	-2.1	-0.00007	mg/L	0.000159	-0.00007	mg/L	0.000159	226.73%
Cot	5.6	0.00024	mg/L	0.000399	0.00024	mg/L	0.000399	168.78%
Crt	-25.2	-0.00036	mg/L	0.000065	-0.00036	mg/L	0.000065	17.93%
Cut	93.7	0.00029	mg/L	0.000012	0.00029	mg/L	0.000012	4.07%
Fet	0.7	0.00087	mg/L	0.001241	0.00087	mg/L	0.001241	142.27%
Kt	16.9	0.0183	mg/L	0.04156	0.0183	mg/L	0.04156	227.09%
Mgt	-8.4	-0.00339	mg/L	0.000571	-0.00339	mg/L	0.000571	16.84%
Mnt	-182.7	-0.00036	mg/L	0.000013	-0.00036	mg/L	0.000013	3.61%
Mot	0.4	0.00003	mg/L	0.000301	0.00003	mg/L	0.000301	989.70%
Nat	98.4	0.0393	mg/L	0.02425	0.0393	mg/L	0.02425	61.76%
Nit	12.5	0.00062	mg/L	0.000068	0.00062	mg/L	0.000068	10.94%
Pbt	5.4	0.00123	mg/L	0.000254	0.00123	mg/L	0.000254	20.69%
Sbt	2.3	0.00130	mg/L	0.000197	0.00130	mg/L	0.000197	15.22%
Set	16.2	0.0136	mg/L	0.00398	0.0136	mg/L	0.00398	29.30%
Tlt	-0.7	-0.00029	mg/L	0.000049	-0.00029	mg/L	0.000049	17.04%
Vt	96.6	0.00065	mg/L	0.000148	0.00065	mg/L	0.000148	22.77%
Znt	2.5	0.00005	mg/L	0.000121	0.00005	mg/L	0.000121	231.38%
Alxt	-87.4	-1.08	ug/L	0.823	-0.00108	mg/L	0.000823	76.13%
Bext	14.9	0.00557	ug/L	0.013125	0.00001	mg/L	0.000013	235.46%

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

Autosampler Location: 22
Date Collected: 7/19/2007 12:42:05
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MRL/2

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: MRL/2

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	357722.1	96.3	%	0.15				0.16%
Yr	172843.2	99.7	%	1.52				1.52%
Agt	1229.4	0.00520	mg/L	0.000120	0.00520	mg/L	0.000120	2.30%
Alt	99.0	0.0299	mg/L	0.00388	0.0299	mg/L	0.00388	12.99%
Ast	94.9	0.0516	mg/L	0.00042	0.0516	mg/L	0.00042	0.81%
B_t	826.8	0.0294	mg/L	0.00022	0.0294	mg/L	0.00022	0.76%
Bat	687.1	0.0104	mg/L	0.00006	0.0104	mg/L	0.00006	0.57%
Bet	1368.9	0.00051	mg/L	0.000019	0.00051	mg/L	0.000019	3.77%
Cat	2779.6	0.517	mg/L	0.0033	0.517	mg/L	0.0033	0.64%
Cdt	74.0	0.00226	mg/L	0.000032	0.00226	mg/L	0.000032	1.40%
Cot	618.1	0.0262	mg/L	0.00008	0.0262	mg/L	0.00008	0.31%
Crt	360.6	0.00517	mg/L	0.000006	0.00517	mg/L	0.000006	0.11%
Cut	1850.4	0.00568	mg/L	0.000019	0.00568	mg/L	0.000019	0.34%
Fet	9.9	0.0124	mg/L	0.00173	0.0124	mg/L	0.00173	13.93%
Kt	471.9	0.510	mg/L	0.0952	0.510	mg/L	0.0952	18.67%
Mgt	128.6	0.0521	mg/L	0.00069	0.0521	mg/L	0.00069	1.32%
Mnt	531.5	0.00103	mg/L	0.000011	0.00103	mg/L	0.000011	1.08%
Mot	119.9	0.0102	mg/L	0.00010	0.0102	mg/L	0.00010	0.95%
Nat	1340.2	0.535	mg/L	0.0045	0.535	mg/L	0.0045	0.84%
Nit	219.7	0.0109	mg/L	0.00038	0.0109	mg/L	0.00038	3.50%
Pbt	49.7	0.0114	mg/L	0.00081	0.0114	mg/L	0.00081	7.08%
Sbt	48.6	0.0267	mg/L	0.00265	0.0267	mg/L	0.00265	9.93%
Set	68.0	0.0572	mg/L	0.00476	0.0572	mg/L	0.00476	8.32%
Tlt	148.1	0.0579	mg/L	0.00122	0.0579	mg/L	0.00122	2.10%
Vt	202.9	0.00140	mg/L	0.000098	0.00140	mg/L	0.000098	7.00%
Znt	482.4	0.0109	mg/L	0.00017	0.0109	mg/L	0.00017	1.55%
Alxt	2252.8	27.9	ug/L	0.42	0.0279	mg/L	0.00042	1.50%
Bext	1368.9	0.512	ug/L	0.0193	0.00051	mg/L	0.000019	3.77%

Sequence No.: 14
Sample ID: MRL2007
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 23
Date Collected: 7/19/2007 12:45:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MRL2007

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: MRL2007

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	370785.8	99.9	%	1.14				1.14%
Yr	181699.3	105	%	0.9				0.82%
Agt	2426.3	0.0103	mg/L	0.00017	0.0103	mg/L	0.00017	1.68%
Alt	127.2	0.0384	mg/L	0.01361	0.0384	mg/L	0.01361	35.42%
Ast	184.5	0.100	mg/L	0.0025	0.100	mg/L	0.0025	2.54%
B_t	1515.6	0.0539	mg/L	0.00015	0.0539	mg/L	0.00015	0.27%
Bat	1352.7	0.0205	mg/L	0.00018	0.0205	mg/L	0.00018	0.89%
Bet	2670.7	0.00100	mg/L	0.000020	0.00100	mg/L	0.000020	2.01%
Cat	5603.2	1.04	mg/L	0.013	1.04	mg/L	0.013	1.26%
Cdt	151.5	0.00472	mg/L	0.000270	0.00472	mg/L	0.000270	5.72%
Cot	1265.7	0.0536	mg/L	0.00036	0.0536	mg/L	0.00036	0.66%
Crt	700.2	0.0100	mg/L	0.00010	0.0100	mg/L	0.00010	0.96%
Cut	3581.7	0.0110	mg/L	0.00021	0.0110	mg/L	0.00021	1.92%
Fet	19.4	0.0244	mg/L	0.00090	0.0244	mg/L	0.00090	3.67%
Kt	873.3	0.944	mg/L	0.0435	0.944	mg/L	0.0435	4.61%
Mgt	253.1	0.103	mg/L	0.0044	0.103	mg/L	0.0044	4.26%
Mnt	1033.5	0.00201	mg/L	0.000031	0.00201	mg/L	0.000031	1.55%
Mot	232.8	0.0199	mg/L	0.00039	0.0199	mg/L	0.00039	1.94%
Nat	2783.6	1.11	mg/L	0.001	1.11	mg/L	0.001	0.07%
Nit	440.4	0.0218	mg/L	0.00013	0.0218	mg/L	0.00013	0.60%
Pbt	97.9	0.0224	mg/L	0.00183	0.0224	mg/L	0.00183	8.17%
Sbt	93.4	0.0513	mg/L	0.00238	0.0513	mg/L	0.00238	4.64%
Set	123.9	0.104	mg/L	0.0018	0.104	mg/L	0.0018	1.76%
Tlt	280.7	0.110	mg/L	0.0031	0.110	mg/L	0.0031	2.84%
Vt	360.8	0.00249	mg/L	0.000453	0.00249	mg/L	0.000453	18.19%
Znt	1004.1	0.0228	mg/L	0.00020	0.0228	mg/L	0.00020	0.87%
Alxt	3946.4	48.8	ug/L	0.95	0.0488	mg/L	0.00095	1.96%
Bext	2670.7	1.000	ug/L	0.0200	0.00100	mg/L	0.000020	2.01%

Sequence No.: 15
Sample ID: MBLANK2007
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 38
Date Collected: 7/19/2007 12:49:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MBLANK2007

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: MBLANK2007

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	370971.9	99.9	%	1.39				1.39%
Yr	177342.7	102	%	0.0				0.02%
Agt	-17.3	-0.00007	mg/L	0.000815	-0.00007	mg/L	0.000815	>999.9%
Alt	-25.7	-0.00775	mg/L	0.019178	-0.00775	mg/L	0.019178	247.44%
Ast	4.3	0.00235	mg/L	0.002020	0.00235	mg/L	0.002020	86.05%
B_t	80.6	0.00287	mg/L	0.000049	0.00287	mg/L	0.000049	1.70%
Bat	3.1	0.00005	mg/L	0.000072	0.00005	mg/L	0.000072	151.54%
Bet	-174.8	-0.00007	mg/L	0.000013	-0.00007	mg/L	0.000013	20.15%
Cat	60.3	0.0112	mg/L	0.00086	0.0112	mg/L	0.00086	7.64%
Cdt	-1.2	-0.00009	mg/L	0.000038	-0.00009	mg/L	0.000038	42.71%
Cot	1.9	0.00008	mg/L	0.000066	0.00008	mg/L	0.000066	81.66%
Crt	-20.8	-0.00030	mg/L	0.000080	-0.00030	mg/L	0.000080	26.91%
Cut	170.1	0.00052	mg/L	0.000052	0.00052	mg/L	0.000052	9.98%
Fet	2.8	0.00349	mg/L	0.001157	0.00349	mg/L	0.001157	33.10%
Kt	49.8	0.0538	mg/L	0.02479	0.0538	mg/L	0.02479	46.10%
Mgt	-7.6	-0.00307	mg/L	0.000115	-0.00307	mg/L	0.000115	3.74%
Mnt	-47.4	-0.00009	mg/L	0.000012	-0.00009	mg/L	0.000012	12.88%
Mot	4.7	0.00040	mg/L	0.000006	0.00040	mg/L	0.000006	1.45%
Nat	122.1	0.0487	mg/L	0.00403	0.0487	mg/L	0.00403	8.27%
Nit	-5.7	-0.00028	mg/L	0.000047	-0.00028	mg/L	0.000047	16.75%
Pbt	5.0	0.00114	mg/L	0.000252	0.00114	mg/L	0.000252	22.15%
Sbt	4.6	0.00254	mg/L	0.001410	0.00254	mg/L	0.001410	55.47%
Set	10.2	0.00856	mg/L	0.005886	0.00856	mg/L	0.005886	68.76%
Tlt	-3.6	-0.00142	mg/L	0.001878	-0.00142	mg/L	0.001878	132.22%
Vt	54.3	0.00037	mg/L	0.000054	0.00037	mg/L	0.000054	14.67%
Znt	112.6	0.00257	mg/L	0.000159	0.00257	mg/L	0.000159	6.18%
Alxt	108.4	1.34	ug/L	0.411	0.00134	mg/L	0.000411	30.65%
Bext	-174.8	-0.0654	ug/L	0.01318	-0.00007	mg/L	0.000013	20.15%

Sequence No.: 16
Sample ID: LCS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 39
Date Collected: 7/19/2007 12:53:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LCS

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: LCS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	368666.3	99.3	%	0.45				0.45%
Yr	183749.9	106	%	0.2				0.22%
Agt	124155.7	0.525	mg/L	0.0017	0.525	mg/L	0.0017	0.33%
Alt	6683.0	2.02	mg/L	0.017	2.02	mg/L	0.017	0.85%
Ast	1958.5	1.07	mg/L	0.006	1.07	mg/L	0.006	0.53%
B_t	14426.1	0.512	mg/L	0.0012	0.512	mg/L	0.0012	0.23%
Bat	67615.9	1.03	mg/L	0.004	1.03	mg/L	0.004	0.35%
Bet	141045.6	0.0528	mg/L	0.00034	0.0528	mg/L	0.00034	0.65%
Cat	274587.2	51.0	mg/L	0.56	51.0	mg/L	0.56	1.10%
Cdt	5231.8	0.202	mg/L	0.0008	0.202	mg/L	0.0008	0.41%
Cot	25108.0	1.06	mg/L	0.003	1.06	mg/L	0.003	0.26%
Crt	70874.4	1.02	mg/L	0.005	1.02	mg/L	0.005	0.52%
Cut	344178.3	1.05	mg/L	0.004	1.05	mg/L	0.004	0.36%
Fet	4185.9	5.26	mg/L	0.003	5.26	mg/L	0.003	0.07%
Kt	18533.9	20.0	mg/L	0.10	20.0	mg/L	0.10	0.48%
Mgt	51265.2	20.8	mg/L	0.05	20.8	mg/L	0.05	0.22%
Mnt	269634.9	0.524	mg/L	0.0021	0.524	mg/L	0.0021	0.39%
Mot	12157.6	1.04	mg/L	0.002	1.04	mg/L	0.002	0.21%
Nat	131580.0	52.5	mg/L	0.04	52.5	mg/L	0.04	0.08%
Nit	10731.3	0.531	mg/L	0.0011	0.531	mg/L	0.0011	0.20%
Pbt	4811.6	1.10	mg/L	0.003	1.10	mg/L	0.003	0.27%
Sbt	941.4	0.503	mg/L	0.0041	0.503	mg/L	0.0041	0.81%
Set	1296.9	1.10	mg/L	0.006	1.10	mg/L	0.006	0.56%
Tlt	2860.7	1.12	mg/L	0.001	1.12	mg/L	0.001	0.05%
Vt	150965.6	1.03	mg/L	0.004	1.03	mg/L	0.004	0.42%
Znt	47230.3	1.07	mg/L	0.004	1.07	mg/L	0.004	0.42%
Alxt	163370.4	2020	ug/L	3.3	2.02	mg/L	0.003	0.16%
Bext	141045.6	52.8	ug/L	0.34	0.0528	mg/L	0.00034	0.65%

Sequence No.: 17
Sample ID: LCSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 40
Date Collected: 7/19/2007 12:57:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LCSD

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: LCSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	372457.9	100	%	0.4				0.41%
Yr	187814.1	108	%	1.5				1.36%
Ag†	115004.4	0.486	mg/L	0.0007	0.486	mg/L	0.0007	0.15%
Al†	6127.1	1.85	mg/L	0.034	1.85	mg/L	0.034	1.84%
As†	1796.0	0.979	mg/L	0.0070	0.979	mg/L	0.0070	0.71%
B_†	13383.0	0.475	mg/L	0.0025	0.475	mg/L	0.0025	0.53%
Ba†	62766.2	0.953	mg/L	0.0030	0.953	mg/L	0.0030	0.31%
Be†	130801.6	0.0490	mg/L	0.00014	0.0490	mg/L	0.00014	0.29%
Ca†	254042.0	47.2	mg/L	0.10	47.2	mg/L	0.10	0.22%
Cd†	4822.0	0.186	mg/L	0.0006	0.186	mg/L	0.0006	0.34%
Co†	23180.5	0.982	mg/L	0.0029	0.982	mg/L	0.0029	0.30%
Cr†	65612.8	0.940	mg/L	0.0021	0.940	mg/L	0.0021	0.22%
Cu†	319289.0	0.976	mg/L	0.0014	0.976	mg/L	0.0014	0.14%
Fe†	3845.8	4.83	mg/L	0.076	4.83	mg/L	0.076	1.56%
K†	16975.9	18.4	mg/L	0.23	18.4	mg/L	0.23	1.27%
Mg†	47103.9	19.1	mg/L	0.26	19.1	mg/L	0.26	1.37%
Mn†	250070.1	0.486	mg/L	0.0012	0.486	mg/L	0.0012	0.24%
Mo†	11250.6	0.961	mg/L	0.0042	0.961	mg/L	0.0042	0.44%
Na†	122709.7	49.0	mg/L	0.23	49.0	mg/L	0.23	0.46%
Ni†	9924.3	0.491	mg/L	0.0020	0.491	mg/L	0.0020	0.40%
Pb†	4414.8	1.01	mg/L	0.005	1.01	mg/L	0.005	0.46%
Sb†	865.5	0.463	mg/L	0.0080	0.463	mg/L	0.0080	1.72%
Se†	1197.1	1.02	mg/L	0.007	1.02	mg/L	0.007	0.73%
Tl†	2654.9	1.04	mg/L	0.004	1.04	mg/L	0.004	0.34%
V†	139589.5	0.948	mg/L	0.0012	0.948	mg/L	0.0012	0.13%
Zn†	43873.3	0.997	mg/L	0.0015	0.997	mg/L	0.0015	0.15%
Alx†	152112.9	1880	ug/L	6.1	1.88	mg/L	0.006	0.32%
Bex†	130801.6	49.0	ug/L	0.14	0.0490	mg/L	0.00014	0.29%

Sequence No.: 18
Sample ID: 2707160228
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 41
Date Collected: 7/19/2007 13:00:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2707160228

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: 2707160228

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	378747.6	102	%	0.3				0.31%
Yr	182155.1	105	%	0.9				0.82%
Agt	29.3	0.00012	mg/L	0.000194	0.00012	mg/L	0.000194	156.43%
Alt	240.6	0.0727	mg/L	0.00317	0.0727	mg/L	0.00317	4.36%
Ast	-4.7	-0.00249	mg/L	0.002113	-0.00249	mg/L	0.002113	85.04%
B_t	480.5	0.0171	mg/L	0.00038	0.0171	mg/L	0.00038	2.21%
Bat	432.7	0.00657	mg/L	0.000009	0.00657	mg/L	0.000009	0.13%
Bet	-116.7	-0.00004	mg/L	0.000009	-0.00004	mg/L	0.000009	20.23%
Cat	60925.1	11.3	mg/L	0.05	11.3	mg/L	0.05	0.45%
Cdt	-8.8	-0.00032	mg/L	0.000085	-0.00032	mg/L	0.000085	26.53%
Cot	4.8	0.00020	mg/L	0.000138	0.00020	mg/L	0.000138	67.79%
Crt	11.5	0.00017	mg/L	0.000191	0.00017	mg/L	0.000191	115.77%
Cut	567.2	0.00173	mg/L	0.000003	0.00173	mg/L	0.000003	0.18%
Fet	85.5	0.107	mg/L	0.0006	0.107	mg/L	0.0006	0.59%
Kt	546.8	0.591	mg/L	0.0152	0.591	mg/L	0.0152	2.57%
Mgt	1900.3	0.770	mg/L	0.0051	0.770	mg/L	0.0051	0.66%
Mnt	1158.8	0.00225	mg/L	0.000010	0.00225	mg/L	0.000010	0.43%
Mot	12.5	0.00106	mg/L	0.000127	0.00106	mg/L	0.000127	11.91%
Nat	16502.8	6.59	mg/L	0.004	6.59	mg/L	0.004	0.06%
Nit	15.7	0.00078	mg/L	0.000602	0.00078	mg/L	0.000602	77.56%
Pbt	3.1	0.00072	mg/L	0.000140	0.00072	mg/L	0.000140	19.42%
Sbt	2.1	0.00119	mg/L	0.001860	0.00119	mg/L	0.001860	156.33%
Set	5.4	0.00478	mg/L	0.001881	0.00478	mg/L	0.001881	39.34%
Tlt	11.1	0.00437	mg/L	0.001296	0.00437	mg/L	0.001296	29.68%
Vt	653.1	0.00441	mg/L	0.000314	0.00441	mg/L	0.000314	7.11%
Znt	2865.3	0.0654	mg/L	0.00050	0.0654	mg/L	0.00050	0.77%
Alxt	7041.6	87.1	ug/L	0.39	0.0871	mg/L	0.00039	0.45%
Bext	-116.7	-0.0437	ug/L	0.00884	-0.00004	mg/L	0.000009	20.23%

Sequence No.: 19
Sample ID: 2707160228MS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 42
Date Collected: 7/19/2007 13:03:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2707160228MS

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: 2707160228MS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	366019.2	98.6	%	0.08				0.08%
Yr	183812.0	106	%	0.4				0.37%
Agt	126328.2	0.534	mg/L	0.0013	0.534	mg/L	0.0013	0.24%
Alt	6931.4	2.09	mg/L	0.018	2.09	mg/L	0.018	0.88%
Ast	1994.6	1.09	mg/L	0.004	1.09	mg/L	0.004	0.41%
B_t	15017.7	0.533	mg/L	0.0047	0.533	mg/L	0.0047	0.89%
Bat	69597.9	1.06	mg/L	0.004	1.06	mg/L	0.004	0.35%
Bet	144185.6	0.0540	mg/L	0.00015	0.0540	mg/L	0.00015	0.28%
Cat	338851.0	63.0	mg/L	0.07	63.0	mg/L	0.07	0.12%
Cdt	5312.4	0.205	mg/L	0.0013	0.205	mg/L	0.0013	0.64%
Cot	25464.6	1.08	mg/L	0.006	1.08	mg/L	0.006	0.53%
Crt	72254.2	1.04	mg/L	0.006	1.04	mg/L	0.006	0.57%
Cut	354374.5	1.08	mg/L	0.001	1.08	mg/L	0.001	0.07%
Fet	4305.9	5.41	mg/L	0.064	5.41	mg/L	0.064	1.18%
Kt	19491.3	21.1	mg/L	0.22	21.1	mg/L	0.22	1.06%
Mgt	54386.9	22.0	mg/L	0.25	22.0	mg/L	0.25	1.16%
Mnt	276628.9	0.538	mg/L	0.0016	0.538	mg/L	0.0016	0.29%
Mot	12339.4	1.05	mg/L	0.006	1.05	mg/L	0.006	0.60%
Nat	151509.3	60.5	mg/L	0.06	60.5	mg/L	0.06	0.11%
Nit	10844.8	0.537	mg/L	0.0024	0.537	mg/L	0.0024	0.44%
Pbt	4852.5	1.11	mg/L	0.004	1.11	mg/L	0.004	0.37%
Sbt	960.9	0.514	mg/L	0.0069	0.514	mg/L	0.0069	1.34%
Set	1315.6	1.12	mg/L	0.018	1.12	mg/L	0.018	1.59%
Tlt	2907.0	1.14	mg/L	0.007	1.14	mg/L	0.007	0.59%
Vt	154403.4	1.05	mg/L	0.004	1.05	mg/L	0.004	0.34%
Znt	50478.5	1.15	mg/L	0.002	1.15	mg/L	0.002	0.19%
Alxt	172004.3	2130	ug/L	5.6	2.13	mg/L	0.006	0.26%
Bext	144185.6	54.0	ug/L	0.15	0.0540	mg/L	0.00015	0.28%

Sequence No.: 20
Sample ID: 2707160228MSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 43
Date Collected: 7/19/2007 13:07:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2707160228MSD

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: 2707160228MSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	372751.7	100	%	0.4				0.36%
Yr	187619.1	108	%	0.5				0.43%
Agt	119525.8	0.505	mg/L	0.0003	0.505	mg/L	0.0003	0.06%
Alt	6543.2	1.98	mg/L	0.022	1.98	mg/L	0.022	1.11%
Ast	1860.2	1.01	mg/L	0.005	1.01	mg/L	0.005	0.49%
B_t	14263.7	0.506	mg/L	0.0005	0.506	mg/L	0.0005	0.10%
Bat	65369.1	0.993	mg/L	0.0024	0.993	mg/L	0.0024	0.24%
Bet	136012.8	0.0509	mg/L	0.00014	0.0509	mg/L	0.00014	0.27%
Cat	318955.4	59.3	mg/L	0.03	59.3	mg/L	0.03	0.05%
Cdt	4962.5	0.191	mg/L	0.0012	0.191	mg/L	0.0012	0.61%
Cot	23939.0	1.01	mg/L	0.006	1.01	mg/L	0.006	0.59%
Crt	68031.4	0.975	mg/L	0.0013	0.975	mg/L	0.0013	0.13%
Cut	333204.4	1.02	mg/L	0.002	1.02	mg/L	0.002	0.22%
Fet	4027.8	5.06	mg/L	0.073	5.06	mg/L	0.073	1.45%
Kt	17991.5	19.4	mg/L	0.40	19.4	mg/L	0.40	2.08%
Mgt	50210.4	20.4	mg/L	0.29	20.4	mg/L	0.29	1.45%
Mnt	260355.4	0.506	mg/L	0.0020	0.506	mg/L	0.0020	0.40%
Mot	11584.5	0.989	mg/L	0.0017	0.989	mg/L	0.0017	0.17%
Nat	142923.8	57.0	mg/L	0.31	57.0	mg/L	0.31	0.54%
Nit	10175.7	0.504	mg/L	0.0012	0.504	mg/L	0.0012	0.24%
Pbt	4516.7	1.03	mg/L	0.003	1.03	mg/L	0.003	0.30%
Sbt	898.0	0.480	mg/L	0.0040	0.480	mg/L	0.0040	0.83%
Set	1236.1	1.05	mg/L	0.001	1.05	mg/L	0.001	0.05%
Tlt	2715.7	1.06	mg/L	0.009	1.06	mg/L	0.009	0.83%
Vt	145489.9	0.988	mg/L	0.0000	0.988	mg/L	0.0000	0.00%
Znt	48152.4	1.09	mg/L	0.002	1.09	mg/L	0.002	0.22%
Alxt	166568.8	2060	ug/L	0.3	2.06	mg/L	0.000	0.02%
Bext	136012.8	50.9	ug/L	0.14	0.0509	mg/L	0.00014	0.27%

Sequence No.: 21
Sample ID: 2707110558_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 44
Date Collected: 7/19/2007 13:11:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2707110558_2X

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: 2707110558_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	341689.1	92.0	%	0.20				0.21%
Yr	179493.5	104	%	0.6				0.54%
Agt	-180.5	-0.00076	mg/L	0.000526	-0.00153	mg/L	0.001052	68.94%
Alt	30.7	0.00927	mg/L	0.001164	0.0185	mg/L	0.00233	12.55%
Ast	-48.8	-0.0256	mg/L	0.00164	-0.0513	mg/L	0.00328	6.40%
B_t	50480.0	1.80	mg/L	0.001	3.60	mg/L	0.002	0.04%
Bat	798.2	0.0121	mg/L	0.00004	0.0242	mg/L	0.00008	0.32%
Bet	-957.6	-0.00036	mg/L	0.000025	-0.00072	mg/L	0.000051	7.10%
Cat	1114055.2	207	mg/L	0.9	414	mg/L	1.9	0.45%
Cdt	-32.3	-0.00082	mg/L	0.000109	-0.00165	mg/L	0.000218	13.24%
Cot	311.6	0.0132	mg/L	0.00009	0.0264	mg/L	0.00019	0.70%
Crt	121.9	0.00175	mg/L	0.000114	0.00349	mg/L	0.000228	6.53%
Cut	604.2	0.00186	mg/L	0.000002	0.00372	mg/L	0.000004	0.10%
Fet	1184.8	1.49	mg/L	0.017	2.98	mg/L	0.034	1.14%
Kt	12851.0	13.9	mg/L	0.09	27.8	mg/L	0.18	0.64%
Mgt	236859.1	96.0	mg/L	0.12	192	mg/L	0.2	0.12%
Mnt	275675.2	0.536	mg/L	0.0010	1.07	mg/L	0.002	0.19%
Mot	1690.0	0.144	mg/L	0.0002	0.289	mg/L	0.0004	0.13%
Nat	1760511.2	703	mg/L	7.1	1410	mg/L	14.2	1.01%
Nit	652.4	0.0323	mg/L	0.00017	0.0646	mg/L	0.00033	0.51%
Pbt	-24.7	-0.00565	mg/L	0.001626	-0.0113	mg/L	0.00325	28.79%
Sbt	18.6	0.0103	mg/L	0.00291	0.0207	mg/L	0.00581	28.12%
Set	-14.9	-0.00961	mg/L	0.002517	-0.0192	mg/L	0.00503	26.18%
Tlt	59.4	0.0233	mg/L	0.00294	0.0465	mg/L	0.00588	12.64%
Vt	2234.8	0.0151	mg/L	0.00000	0.0302	mg/L	0.00000	0.01%
Znt	416.3	0.00928	mg/L	0.000164	0.0186	mg/L	0.00033	1.76%
Alxt	1769.7	21.9	ug/L	0.21	0.0438	mg/L	0.00042	0.95%
Bext	-957.6	-0.358	ug/L	0.0255	-0.00072	mg/L	0.000051	7.10%

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:
Plasma has been extinguished

Autosampler Location: 4
Date Collected: 7/19/2007 13:15:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Analysis Begun

Start Time: 7/19/2007 13:36:10
Logged In Analyst: Owner
Spectrometer Model: Optima 4300 DV, S/N 077N2121801

Plasma On Time: 7/19/2007 13:34:28
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\Owner\Sample Information\070719.sif
Batch ID: 070719
Results Data Set: 070719
Results Library: C:\pe\Owner\Results\Results.mdb

Sequence No.: 22
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 7/19/2007 13:36:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	357244.6	96.2	%	0.29				0.30%
Yr	170137.7	98.2	%	1.07				1.09%
Ag†	202993.7	0.858	mg/L	0.0004	0.858	mg/L	0.0004	0.05%
QC value within limits for Ag		Recovery = 85.81%						
Al†	16812.1	5.08	mg/L	0.073	5.08	mg/L	0.073	1.43%
QC value within limits for Al		Recovery = 101.57%						
As†	9602.4	5.22	mg/L	0.011	5.22	mg/L	0.011	0.21%
QC value within limits for As		Recovery = 104.49%						
B_†	74000.4	2.62	mg/L	0.007	2.62	mg/L	0.007	0.27%
QC value within limits for B_		Recovery = 104.98%						
Ba†	346967.0	5.27	mg/L	0.006	5.27	mg/L	0.006	0.12%
QC value within limits for Ba		Recovery = 105.40%						
Be†	5658991.8	2.12	mg/L	0.010	2.12	mg/L	0.010	0.46%
QC value within limits for Be		Recovery = 105.91%						
Ca†	290518.1	54.0	mg/L	0.08	54.0	mg/L	0.08	0.16%
QC value within limits for Ca		Recovery = 107.97%						
Cd†	64555.3	2.60	mg/L	0.009	2.60	mg/L	0.009	0.36%
QC value within limits for Cd		Recovery = 103.90%						
Co†	127445.0	5.40	mg/L	0.008	5.40	mg/L	0.008	0.15%
QC value within limits for Co		Recovery = 107.94%						
Cr†	364426.9	5.22	mg/L	0.002	5.22	mg/L	0.002	0.03%
QC value within limits for Cr		Recovery = 104.42%						
Cu†	1644674.7	5.03	mg/L	0.013	5.03	mg/L	0.013	0.26%
QC value within limits for Cu		Recovery = 100.59%						
Fe†	4325.4	5.43	mg/L	0.054	5.43	mg/L	0.054	1.00%
QC value within limits for Fe		Recovery = 108.69%						
K†	46581.1	50.4	mg/L	0.32	50.4	mg/L	0.32	0.63%
QC value within limits for K		Recovery = 100.71%						
Mg†	129515.6	52.5	mg/L	0.00	52.5	mg/L	0.00	0.00%
QC value within limits for Mg		Recovery = 105.01%						
Mn†	2710405.1	5.27	mg/L	0.009	5.27	mg/L	0.009	0.17%
QC value within limits for Mn		Recovery = 105.42%						
Mo†	61329.8	5.24	mg/L	0.002	5.24	mg/L	0.002	0.04%
QC value within limits for Mo		Recovery = 104.72%						

Na†	132481.0	52.9 mg/L	0.04	52.9 mg/L	0.04	0.08%
QC value within limits for Na Recovery = 105.73%						
Ni†	110569.5	5.47 mg/L	0.014	5.47 mg/L	0.014	0.25%
QC value within limits for Ni Recovery = 109.46%						
Pb†	24376.5	5.58 mg/L	0.035	5.58 mg/L	0.035	0.62%
QC value greater than the upper limit for Pb Recovery = 111.55%						
Sb†	9447.2	5.13 mg/L	0.038	5.13 mg/L	0.038	0.73%
QC value within limits for Sb Recovery = 102.59%						
Se†	6587.5	5.55 mg/L	0.039	5.55 mg/L	0.039	0.70%
QC value within limits for Se Recovery = 110.91%						
Tl†	14116.9	5.53 mg/L	0.025	5.53 mg/L	0.025	0.45%
QC value greater than the upper limit for Tl Recovery = 110.67%						
V†	753326.9	5.12 mg/L	0.005	5.12 mg/L	0.005	0.09%
QC value within limits for V Recovery = 102.33%						
Zn†	240148.0	5.44 mg/L	0.019	5.44 mg/L	0.019	0.34%
QC value within limits for Zn Recovery = 108.81%						
Alx†	400705.3	4950 ug/L	10.3	4.95 mg/L	0.010	0.21%
QC value within limits for Alx Recovery = 99.08%						
Bex†	5658991.8	2120 ug/L	9.7	2.12 mg/L	0.010	0.46%
QC value within limits for Bex Recovery = 105.91%						
QC Failed. Retry.						

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 7/19/2007 13:38:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	365683.5	98.5	%	0.53				0.53%
Yr	178372.2	103	%	0.3				0.31%
Ag†	199282.1	0.842	mg/L	0.0010	0.842	mg/L	0.0010	0.12%
QC value within limits for Ag Recovery = 84.24%								
Al†	16221.0	4.90	mg/L	0.082	4.90	mg/L	0.082	1.68%
QC value within limits for Al Recovery = 98.00%								
As†	9164.6	4.99	mg/L	0.025	4.99	mg/L	0.025	0.49%
QC value within limits for As Recovery = 99.72%								
B_†	72267.6	2.56	mg/L	0.002	2.56	mg/L	0.002	0.08%
QC value within limits for B_ Recovery = 102.52%								
Ba†	337403.6	5.12	mg/L	0.000	5.12	mg/L	0.000	0.00%
QC value within limits for Ba Recovery = 102.50%								
Be†	5468382.7	2.05	mg/L	0.005	2.05	mg/L	0.005	0.25%
QC value within limits for Be Recovery = 102.35%								
Ca†	279638.2	52.0	mg/L	0.04	52.0	mg/L	0.04	0.08%
QC value within limits for Ca Recovery = 103.93%								
Cd†	62348.7	2.51	mg/L	0.012	2.51	mg/L	0.012	0.46%
QC value within limits for Cd Recovery = 100.39%								
Co†	122878.4	5.20	mg/L	0.017	5.20	mg/L	0.017	0.32%
QC value within limits for Co Recovery = 104.07%								
Cr†	353373.8	5.06	mg/L	0.004	5.06	mg/L	0.004	0.07%
QC value within limits for Cr Recovery = 101.25%								
Cu†	1623095.2	4.96	mg/L	0.005	4.96	mg/L	0.005	0.09%
QC value within limits for Cu Recovery = 99.27%								
Fe†	4092.2	5.14	mg/L	0.096	5.14	mg/L	0.096	1.87%
QC value within limits for Fe Recovery = 102.83%								
K†	45152.7	48.8	mg/L	0.03	48.8	mg/L	0.03	0.07%
QC value within limits for K Recovery = 97.62%								
Mg†	125974.5	51.1	mg/L	0.00	51.1	mg/L	0.00	0.00%
QC value within limits for Mg Recovery = 102.14%								
Mn†	2631400.6	5.12	mg/L	0.011	5.12	mg/L	0.011	0.21%
QC value within limits for Mn Recovery = 102.35%								
Mo†	59505.4	5.08	mg/L	0.009	5.08	mg/L	0.009	0.17%

QC value within limits for Mo	Recovery = 101.60%				
Na† 129099.4	51.5 mg/L	0.20	51.5 mg/L	0.20	0.39%
QC value within limits for Na	Recovery = 103.03%				
Ni† 106437.5	5.27 mg/L	0.010	5.27 mg/L	0.010	0.18%
QC value within limits for Ni	Recovery = 105.37%				
Pb† 23251.3	5.32 mg/L	0.008	5.32 mg/L	0.008	0.14%
QC value within limits for Pb	Recovery = 106.40%				
Sb† 9085.9	4.93 mg/L	0.022	4.93 mg/L	0.022	0.45%
QC value within limits for Sb	Recovery = 98.66%				
Se† 6251.5	5.26 mg/L	0.028	5.26 mg/L	0.028	0.52%
QC value within limits for Se	Recovery = 105.25%				
Tl† 13617.3	5.34 mg/L	0.000	5.34 mg/L	0.000	0.01%
QC value within limits for Tl	Recovery = 106.76%				
V† 738387.7	5.01 mg/L	0.003	5.01 mg/L	0.003	0.06%
QC value within limits for V	Recovery = 100.30%				
Zn† 230963.5	5.23 mg/L	0.012	5.23 mg/L	0.012	0.22%
QC value within limits for Zn	Recovery = 104.65%				
Alx† 399013.2	4930 ug/L	36.2	4.93 mg/L	0.036	0.73%
QC value within limits for Alx	Recovery = 98.66%				
Bex† 5468382.7	2050 ug/L	5.2	2.05 mg/L	0.005	0.25%
QC value within limits for Bex	Recovery = 102.35%				

All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 0**
Sample ID: CCB **Date Collected: 7/19/2007 13:41:13**
Analyst: Walter Hsieh **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: 1X **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	365034.7	98.3	%	0.81				0.82%
Yr	176889.8	102	%	0.1				0.06%
Agt	-28.3	-0.00012	mg/L	0.000310	-0.00012	mg/L	0.000310	259.89%
QC value within limits for Ag	Recovery = Not calculated							
Alt	-6.4	-0.00192	mg/L	0.006779	-0.00192	mg/L	0.006779	352.19%
QC value within limits for Al	Recovery = Not calculated							
Ast	33.6	0.0183	mg/L	0.00126	0.0183	mg/L	0.00126	6.91%
QC value within limits for As	Recovery = Not calculated							
B_t	508.6	0.0181	mg/L	0.00149	0.0181	mg/L	0.00149	8.21%
QC value within limits for B_	Recovery = Not calculated							
Bat	652.8	0.00992	mg/L	0.014036	0.00992	mg/L	0.014036	141.54%
QC value within limits for Ba	Recovery = Not calculated							
Bet	-106.9	-0.00004	mg/L	0.000008	-0.00004	mg/L	0.000008	19.17%
QC value within limits for Be	Recovery = Not calculated							
Cat	-2.5	-0.00046	mg/L	0.000467	-0.00046	mg/L	0.000467	101.15%
QC value within limits for Ca	Recovery = Not calculated							
Cdt	47.1	0.00163	mg/L	0.000068	0.00163	mg/L	0.000068	4.17%
QC value within limits for Cd	Recovery = Not calculated							
Cot	5.8	0.00025	mg/L	0.000428	0.00025	mg/L	0.000428	173.00%
QC value within limits for Co	Recovery = Not calculated							
Crt	31.6	0.00045	mg/L	0.000198	0.00045	mg/L	0.000198	43.77%
QC value within limits for Cr	Recovery = Not calculated							
Cut	129.4	0.00040	mg/L	0.000215	0.00040	mg/L	0.000215	54.34%
QC value within limits for Cu	Recovery = Not calculated							
Fet	0.5	0.00066	mg/L	0.001384	0.00066	mg/L	0.001384	208.14%
QC value within limits for Fe	Recovery = Not calculated							
Kt	184.6	0.200	mg/L	0.0301	0.200	mg/L	0.0301	15.10%
QC value within limits for K	Recovery = Not calculated							
Mgt	-2.2	-0.00090	mg/L	0.000333	-0.00090	mg/L	0.000333	37.00%
QC value within limits for Mg	Recovery = Not calculated							
Mnt	-36.7	-0.00007	mg/L	0.000016	-0.00007	mg/L	0.000016	21.83%
QC value within limits for Mn	Recovery = Not calculated							
Mot	10.5	0.00090	mg/L	0.000111	0.00090	mg/L	0.000111	12.40%
QC value within limits for Mo	Recovery = Not calculated							
Nat	328.9	0.131	mg/L	0.0117	0.131	mg/L	0.0117	8.92%
QC value within limits for Na	Recovery = Not calculated							
Nit	4.9	0.00024	mg/L	0.000091	0.00024	mg/L	0.000091	37.93%
QC value within limits for Ni	Recovery = Not calculated							
Pbt	6.9	0.00157	mg/L	0.001820	0.00157	mg/L	0.001820	115.76%
QC value within limits for Pb	Recovery = Not calculated							
Sbt	22.1	0.0122	mg/L	0.00031	0.0122	mg/L	0.00031	2.54%
QC value within limits for Sb	Recovery = Not calculated							
Set	19.1	0.0160	mg/L	0.00173	0.0160	mg/L	0.00173	10.82%
QC value within limits for Se	Recovery = Not calculated							
Tlt	34.7	0.0136	mg/L	0.00276	0.0136	mg/L	0.00276	20.31%
QC value within limits for Tl	Recovery = Not calculated							
Vt	100.3	0.00068	mg/L	0.000183	0.00068	mg/L	0.000183	26.91%
QC value within limits for V	Recovery = Not calculated							
Znt	66.0	0.00150	mg/L	0.000093	0.00150	mg/L	0.000093	6.19%
QC value within limits for Zn	Recovery = Not calculated							
Alxt	70.0	0.866	ug/L	0.3928	0.00087	mg/L	0.000393	45.36%
QC value within limits for Alx	Recovery = Not calculated							
Bext	-106.9	-0.0400	ug/L	0.00767	-0.00004	mg/L	0.000008	19.17%
QC value within limits for Bex	Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 28
Sample ID: WASH
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 0
Date Collected: 7/19/2007 13:57:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: WASH

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: WASH

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	371056.6	99.9	%	0.55				0.55%
Yr	183743.3	106	%	0.3				0.29%
Agt	-9.1	-0.00004	mg/L	0.000448	-0.00004	mg/L	0.000448	>999.9%
Alt	-38.9	-0.0117	mg/L	0.00529	-0.0117	mg/L	0.00529	45.03%
Ast	3.6	0.00197	mg/L	0.000867	0.00197	mg/L	0.000867	43.98%
B_t	628.0	0.0224	mg/L	0.00077	0.0224	mg/L	0.00077	3.45%
Bat	-0.2	0.00000	mg/L	0.000015	0.00000	mg/L	0.000015	403.52%
Bet	-68.0	-0.00003	mg/L	0.000005	-0.00003	mg/L	0.000005	18.47%
Cat	12.2	0.00226	mg/L	0.002444	0.00226	mg/L	0.002444	107.92%
Cdt	9.9	0.00038	mg/L	0.000338	0.00038	mg/L	0.000338	89.92%
Cot	0.1	0.00000	mg/L	0.000094	0.00000	mg/L	0.000094	>999.9%
Crt	23.6	0.00034	mg/L	0.000075	0.00034	mg/L	0.000075	22.11%
Cut	199.6	0.00061	mg/L	0.000098	0.00061	mg/L	0.000098	16.08%
Fet	-0.4	-0.00048	mg/L	0.000943	-0.00048	mg/L	0.000943	195.37%
Kt	39.5	0.0427	mg/L	0.04741	0.0427	mg/L	0.04741	111.00%
Mgt	-0.2	-0.00008	mg/L	0.000369	-0.00008	mg/L	0.000369	445.12%
Mnt	114.1	0.00022	mg/L	0.000016	0.00022	mg/L	0.000016	7.00%
Mot	5.3	0.00045	mg/L	0.000019	0.00045	mg/L	0.000019	4.23%
Nat	814.7	0.325	mg/L	0.0275	0.325	mg/L	0.0275	8.47%
Nit	7.1	0.00035	mg/L	0.000285	0.00035	mg/L	0.000285	81.47%
Pbt	-3.9	-0.00090	mg/L	0.000369	-0.00090	mg/L	0.000369	41.11%
Sbt	4.9	0.00268	mg/L	0.000903	0.00268	mg/L	0.000903	33.67%
Set	8.4	0.00706	mg/L	0.000891	0.00706	mg/L	0.000891	12.61%
Tlt	6.9	0.00269	mg/L	0.000876	0.00269	mg/L	0.000876	32.59%
Vt	70.1	0.00048	mg/L	0.000446	0.00048	mg/L	0.000446	93.68%
Znt	37.5	0.00085	mg/L	0.000065	0.00085	mg/L	0.000065	7.61%
Alxt	113.2	1.40	ug/L	0.370	0.00140	mg/L	0.000370	26.47%
Bext	-68.0	-0.0254	ug/L	0.00470	-0.00003	mg/L	0.000005	18.47%

Sequence No.: 29
Sample ID: WASH
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 0
Date Collected: 7/19/2007 14:00:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: WASH

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: WASH

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	372337.5	100	%	1.1				1.06%
Yr	181038.2	104	%	1.5				1.40%
Agt	27.6	0.00012	mg/L	0.000269	0.00012	mg/L	0.000269	230.42%
Alt	-9.0	-0.00273	mg/L	0.003883	-0.00273	mg/L	0.003883	142.30%
Ast	-0.3	-0.00017	mg/L	0.000210	-0.00017	mg/L	0.000210	121.32%
B_t	426.2	0.0152	mg/L	0.00077	0.0152	mg/L	0.00077	5.10%
Bat	1.0	0.00002	mg/L	0.000056	0.00002	mg/L	0.000056	360.19%
Bet	-26.4	-0.00001	mg/L	0.000037	-0.00001	mg/L	0.000037	370.48%
Cat	1.3	0.00024	mg/L	0.000585	0.00024	mg/L	0.000585	242.66%

Cdt	3.2	0.00014 mg/L	0.000058	0.00014 mg/L	0.000058	42.01%
Cot	4.0	0.00017 mg/L	0.000035	0.00017 mg/L	0.000035	20.85%
Crt	18.4	0.00026 mg/L	0.000152	0.00026 mg/L	0.000152	57.65%
Cut	69.5	0.00021 mg/L	0.000022	0.00021 mg/L	0.000022	10.49%
Fet	0.7	0.00090 mg/L	0.002376	0.00090 mg/L	0.002376	262.78%
Kt	30.2	0.0327 mg/L	0.02791	0.0327 mg/L	0.02791	85.45%
Mgt	2.2	0.00089 mg/L	0.000025	0.00089 mg/L	0.000025	2.78%
Mnt	74.9	0.00015 mg/L	0.000022	0.00015 mg/L	0.000022	15.32%
Mot	1.3	0.00011 mg/L	0.000059	0.00011 mg/L	0.000059	55.02%
Nat	638.3	0.255 mg/L	0.0041	0.255 mg/L	0.0041	1.60%
Nit	0.2	0.00001 mg/L	0.000108	0.00001 mg/L	0.000108	>999.9%
Pbt	-0.9	-0.00021 mg/L	0.000882	-0.00021 mg/L	0.000882	422.96%
Sbt	1.4	0.00076 mg/L	0.003330	0.00076 mg/L	0.003330	439.18%
Set	9.0	0.00754 mg/L	0.009378	0.00754 mg/L	0.009378	124.45%
Tlt	6.6	0.00257 mg/L	0.001218	0.00257 mg/L	0.001218	47.46%
Vt	70.4	0.00048 mg/L	0.000274	0.00048 mg/L	0.000274	57.42%
Znt	34.2	0.00078 mg/L	0.000086	0.00078 mg/L	0.000086	11.08%
Alxt	53.1	0.656 ug/L	0.9972	0.00066 mg/L	0.000997	151.97%
Bext	-26.4	-0.00987 ug/L	0.036556	-0.00001 mg/L	0.000037	370.48%

Standard Preparation Worksheet & Certificate of Analysis

Reagent	Lot #		
HNO3 R# 100411		HCL R# 100412	
IS = Yttrium(ME0702007)0.75mL + Scandium ME0606006)0.5mL to 1000mL w/ 2% HNO3			
Standards	**Lot #**	**Exp. Date**	**Dilution**
Calibration (Prepare daily)	ME0704023 ME0704024	(05/01/08) ✓ (05/01/08) ✓	1:10 ME0704027 1:10
CCV/MCV/ECV (Prepare daily)	ME0610005	(04/10/08) ✓	CCV/ECV 1:20 ME0610006 MCV 1:40 ME0610007
Spike/LCS (Prepare daily)	ME0606004 ME0705006 ME0704005	(12/13/07) ✓ (10/01/07) ✓ (10/04/08) ✓	1:100 ME0601006 1:100 1:200
MRL (Prepare daily)	ME0703010	(09/16/07) ✓	1:100 ME0603015
ICSA	ME0705012	(08/23/07) ✓	
ICSAB	ME0705013	(08/23/07) ✓	
QC-25 1PPM	ME0705005	(11/09/07) ✓	
Linearity	ME0705004	(11/09/07) ✓	
Method Sr/Ti/Sn/SiO2			
Calibration	ME0705008	(08/01/07) ✓	
CCV/ECV	ME0703007	(09/16/07) ✓	
Spike/LCS (Prepare daily)	ME0703006	(09/16/07) ✓	1:100
MRL (Prepare daily)	ME0705007	(11/09/07) ✓	1:100
Method Li			
Std/ICV/MRL (Prepare daily)	ME0703008	(09/16/07) ✓	1:1000, 200, 40, 10
LCS/Spike (Prepare daily)	ME0707002	(01/10/08) ✓	1:50
ccv (Prepare daily)	ME0707001	(10/31/07) ✓	1:40

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.
From 10/4/06: the QC-25 1ppm solution ref # should be ME0610001 not ME0610002.

Intial: wbh
Date: 4/23/07

METALS STANDARD DOCUMENTATION

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

ME #: 07040027
By: wbh
Lot #:
Certificate: NO
NIST SRM:
Storage: Room Temp

Component	Comment	Conc. Unit:
Mo	1:10 ME0704024	10 ug/ml
Sb		10 ug/ml
Sn		10 ug/ml
Ti		10 ug/ml
B		10 ug/ml
Ca	1:10 ME0704023	5 ug/ml
K		100 ug/ml
Mg		100 ug/ml
Na		100 ug/ml
Al		100 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		10 ug/ml
Be		5 ug/ml
SR		4 ug/ml
Ag		3 ug/ml
		2 ug/ml

Intial: WBH
Date: 4/23/07

METALS STANDARD DOCUMENTATION

Standard: ICPCalibration Stock Std #2
Date Received/Prepped: 4/23/2007
Date Expired: 5/1/2008
Manufacturer: Inorganic Ventures
Matrix: 5% Nitric Acid + Trace HF
Amount: 500 mL

ME #: 0704024
By: wbh
Lot #: A2-MEB235011
Certificate: Y
NIST SRM: Varies
Storage: Room Temp

Component	Comment	Conc.	Unit:
Mo	(P/N MWH-ICAP-CAL-2)	100	ug/ml

Intial: WBH
Date: 4/23/07

METALS STANDARD DOCUMENTATION

Standard:	ICPCalibration Stock Std #1	**ME #:**	0704023
Date Received/Prepped:	4/23/2007	**By:**	wbh
Date Expired:	5/1/2008	**Lot #:**	A2-MEB235010
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

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

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 Principals."

MZ0704024

2.0 **DESCRIPTION OF CRM**

Custom Solution

Catalog No.: MWH-ICAP-CAL-2

Lot Number: **A2-MEB235011**

Matrix: tr. HF, 5% HNO3(abs)

100.00 µg/mL each:
Mo, Sb, Sn, Ti,
50.00 µg/mL each:
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	50.07 ± 0.28 µg/mL	Molybdenum, Mo	100.3 ± 0.3 µg/mL
Tin, Sn	100.3 ± 0.3 µg/mL	Titanium, Ti	100.5 ± 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:

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

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

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_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 **TRACEBILITY 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.

INORGANIC™ VENTURES

CERTIFICATE OF ANALYSIS

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 Principals."

M8070403

2.0 **DESCRIPTION OF CRM**

	Custom Solution
Catalog No.:	MWH-ICAP-CAL-1
Lot Number:	**A2-MEB235010**
Matrix:	5% HNO3(abs)

1,000.00 µg/mL each:
Ca, K, Mg, Na,
100.00 µg/mL each:
Al, As, Ba, Co, Cr3, Cu, Fe, Mn, Ni, Pb, Se, Tl, V, Zn,
50.00 µg/mL each:
Cd,
40.00 µg/mL each:
Be,
30.00 µg/mL each:
Sr,
20.00 µg/mL each:
Ag

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	100.1 ± 0.5 µg/mL	Arsenic, As	100.2 ± 0.3 µg/mL	Barium, Ba	99.9 ± 0.2 µg/mL
Beryllium, Be	39.98 ± 0.08 µg/mL	Cadmium, Cd	50.05 ± 0.12 µg/mL	Calcium, Ca	997 ± 3 µg/mL
Chromium+3, Cr3	100.1 ± 0.4 µg/mL	Cobalt, Co	100.1 ± 0.2 µg/mL	Copper, Cu	100.1 ± 0.2 µg/mL
Iron, Fe	100.0 ± 0.2 µg/mL	Lead, Pb	100.1 ± 0.3 µg/mL	Magnesium, Mg	996 ± 3 µg/mL
Manganese, Mn	100.1 ± 0.3 µg/mL	Nickel, Ni	100.1 ± 0.2 µg/mL	Potassium, K	1,003 ± 2 µg/mL
Selenium, Se	100.1 ± 0.2 µg/mL	Silver, Ag	20.03 ± 0.06 µg/mL	Sodium, Na	997 ± 6 µg/mL
Strontium, Sr	29.92 ± 0.18 µg/mL	Thallium, Tl	100.0 ± 0.1 µg/mL	Vanadium, V	100.1 ± 0.3 µg/mL
Zinc, Zn	100.1 ± 0.4 µg/mL				

Certified Density: 1.056 g/mL (measured at 22° C)

Intial: WBH
Date: 10/17/06

METALS STANDARD DOCUMENTATION

Standard:	ICP MCV working Standard	**ME #:**	0610007
Date Received/Prepped:	10/17/2006	**By:**	WBH
Date Expired:	4/10/2008	**Lot #:**	
Manufacturer:	MWH-WBH	**Certificate:**	Y
Matrix:	2% HNO3 + 2% HCl	**NIST SRM:**	Varius
Amount:	Prep daily	**Storage:**	Room Temp

Component	Comment	Conc.	Unit:
Ag		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		1.25	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

Intial: WBH
Date: 10/17/06

METALS STANDARD DOCUMENTATION

Standard: ICP CCV/ECV working Standard
Date Received/Prepped: 10/17/2006
Date Expired: 4/10/2008
Manufacturer: MWH-WBH
Matrix: 2% HNO3 + 2% HCl
Amount: Prep daily

ME #: 0610006
By: WBH
Lot #:
Certificate: Y
NIST SRM: Varius
Storage: Room Temp

Component	Comment	Conc. Unit:
Ag		1 ppm
Al		5 ppm
As		5 ppm
B		2.5 ppm
Ba		5 ppm
Be		2 ppm
Ca		50 ppm
Cd		2.5 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

Intial: WBH
Date: 10/17/06

METALS STANDARD DOCUMENTATION

Standard: ICP CCV/MCV Stock Standard
Date Received/Prepped: 10/17/2006
Date Expired: 4/10/2008
Manufacturer: CPI
Matrix: 5% HNO3 = tr HF
Amount: 100 mL x 10

ME #: 0610005
By: WBH
Lot #: 06j053
Certificate: Y
NIST SRM: Varius
Storage: Room Temp

Component	Comment	Conc. Unit:
Ag		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: 4/10/2008

Certificate of Analysis

M20610025

Part Number: **4400-061003RH01**
Lot Number: **06J053**
Shelf Life: **18 months**

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.

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METALS STANDARD DOCUMENTATION

CMB
6/19/06

Standard: ICP/ICPMS LCS/SPIKE Solution

ME #: 0606004

Date Received/Prepped: 6/19/2006
Date Expired: 12/13/2006
Manufacturer: CPI
Matrix: 5% HNO3 + 0.1% HF
Amount: 10 x 100 mL

By: wbh
Lot #: 06F103
Certificate: Y
NIST SRM: 3100 Series
Storage: Room Temp

Component	Comment	Conc. Unit:
Iron	CPI P/N: 4400-050314RH01	500 mg/L
Aluminum		200 mg/L
Barium		100 mg/L
Cobalt		100 mg/L
Chromium		100 mg/L
Copper		100 mg/L
Molybdenum		100 mg/L
Strontium		100 mg/L
Titanium		100 mg/L
Vanadium		100 mg/L
Zinc		100 mg/L
Tin		100 mg/L
Silver		50 mg/L
Boron		50 mg/L
Manganese		50 mg/L
Nickel		50 mg/L
Antimony		50 mg/L
Arsenic		20 mg/L
Cadmium		20 mg/L
Lead		20 mg/L
Selenium		20 mg/L
Thallium		20 mg/L
Uraium		20 mg/L
Beryllium		5 mg/L
Tin		100 mg/L

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Expiry: 12/13/2007

Certificate of Analysis

Part Number: **4400-050314RH01**
Lot Number: **06F103**
Shelf Life: **18 months**

MZC 62604

MWH Labs
5% HNO3 + 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.

Intial: WBH

Date: 5/9/07

METALS STANDARD DOCUMENTATION

Standard: ICP Spike solution
Date Received/Prepped: 5/9/2007
Date Expired: 10/1/2007
Manufacturer: MWH-WBH

Matrix: 2% HNO3
Amount: 100mL x 2

ME #: 0705006
By: WBH
Lot #:
Certificate: Y

NIST SRM: 3100 SERIES
Storage: Room Temp

Component	Comment	Conc. Unit:
AS	8.0mL ME0611005/100mL	80 ppm
PB	8.0mL ME0704013/100mL	80 ppm
SE	8.0mL ME0703001/100mL	80 ppm
TL	8.0mL ME0702006/100mL	80 ppm

Intial: WBH
Date: 11/1/06

METALS STANDARD DOCUMENTATION

Standard:	Arsenic Stock Std	**ME #:**	0611005
Date Received/Prepped:	11/1/2006	**By:**	WBH
Date Expired:	10/1/2007	**Lot #:**	Y-AS02029
Manufacturer:	IV	**Certificate:**	Y
Matrix:	1.4% HNO3	**NIST SRM:**	
Amount:	100mL	**Storage:**	Room Temp

Component	Comment	Conc.	Unit:
AS	Cat # CGAS1-1	1004	ppm

INORGANIC VENTURES

CERTIFICATE OF ANALYSIS

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2.0 DESCRIPTION OF CRM 1000 µg/mL Arsenic in 1.4% (abs) HNO3

Catalog Number:	CGAS1-1, CGAS1-2, and CGAS1-5
Lot Number:	**Y -AS02029**
Starting Material:	As Polycrystaline lump
Starting Material Purity (%):	99.999055
Starting Material Lot No:	23115
Matrix:	1.4% (abs) HNO3

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 1004 ± 2 µg/mL 995 ± 2 µg/g

Certified Density: 1.009 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:

Certified Value ($\bar{x}$) = $\frac{\sum x1}{n}$ ($\bar{x}$) = mean, x1 = individual results, n = number of measurements

Uncertainty (±) = $\frac{2[(\sum s1)2]^{1/2}}{(n)}$ $\sum s1$ = The summation of all significant estimated errors (Most common are the errors from instrumental measurement weighting, 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 IV 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 1004 ± 2 µg/mL 995 ± 2 µg/g (Avg 2 runs)
ICP Assay NIST SRM 3103a Lot Number: 010713

Assay Method #2 1003 ± 5 µg/mL 994 ± 5 µg/g
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Intial: 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

1207040 13

Single-Element Lead Standard
Pb in 2% HNO_3
1000 ± 3 µg/mL

Lot # 07A097

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.

	ppb	DL		ppb	DL		ppb	DL		ppb	DL		ppb	DL
Al	10.3	0.1	Cu	58	0.1	Pb	X	0.1	K	ND	70	Tl	0.25	0.1
Sb	ND	0.1	Dy	ND	0.1	Li	2	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	0.22	0.1	Eu	ND	0.1	Mg	1.4	0.2	Rh	IN	0.1	Sn	ND	0.1
Be	0.58	0.1	Gd	ND	0.1	Mn	3.8	1	Rb	ND	0.1	Ti	0.58	0.1
Bi	0.7	0.1	Ga	ND	0.1	Hg	ND	0.2	Ru	ND	0.1	W	ND	0.1
B	ND	4	Ge	ND	0.1	Mo	0.17	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	ND	0.1	Hf	ND	0.1	Ni	0.9	0.1	Si	31	8	Yb	ND	0.1
Ca	25	7	Ho	ND	0.1	Nb	ND	0.1	Ag	6.1	0.1	Y	ND	0.1
Ce	ND	0.1	I	0.1	0.2	Os	ND	0.1	Na	3.5	1	Zn	23	2
Cs	0.26	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	ND	0.1	Zr	INT	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.

Intial: WBH
Date: 2/20/07

METALS STANDARD DOCUMENTATION

Standard:	Thallium 1000ppm Stock Std	**ME #:**	0702006
Date Received/Prepped:	2/20/2007	**By:**	WBH
Date Expired:	8/16/2008	**Lot #:**	06H213
Manufacturer:	CPI	**Certificate:**	Y
Matrix:	2% HNO3	**NIST SRM:**	3158
Amount:	100 mL	Room temp. storage	

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

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MF0702006

CERTIFICATE OF ANALYSIS

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

Single Element Thallium Standard
Tl in 2% HNO_3
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-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 3158. Trace impurities of the 1000 µg/mL standard were analyzed by ICP-MS.

	ppb	DL		ppb	DL		Ppb	DL		ppb	DL		ppb	DL
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.

Intial: WJ
Date: 3/5/07

METALS STANDARD DOCUMENTATION

Standard:	Selenium Stock Standard	ME #:	0703001
Date Received/Prepped:	3/5/2007	By:	wpn
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

Component	Comment	Conc.	Unit:
Se	P/N # S4400-1000491	1000	ppm

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CERTIFICATE OF ANALYSIS

MEC7030.1

P/N 4400-1000491
P/N S4400-1000491

Single-Element Selenium Standard
Se in 2% HNO_3
1000 ± 3 µg/mL

Lot # 06E228

Material Source: Selenium Metal
Source Purity: 99.99%
Specific Gravity: 1.011 @ 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 3148. Trace impurities of the 1000 µg/mL standard were analyzed by ICP-MS.

	ppb	DL		ppb	DL		ppb	DL		ppb	DL		ppb	DL
Al	1.8	0.1	Cu	0.4	0.1	Pb	0.3	0.1	K	ND	70	Tl	3.6	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	ND	0.1	Eu	ND	0.1	Mg	1.1	0.2	Rh	ND	0.1	Sn	ND	0.1
Be	ND	0.1	Gd	ND	0.1	Mn	ND	1	Rb	ND	0.1	Ti	ND	0.1
Bi	ND	0.1	Ga	ND	0.1	Hg	ND	0.2	Ru	ND	0.1	W	ND	0.1
B	ND	4	Ge	ND	0.1	Mo	0.6	0.1	Sm	ND	0.1	U	ND	0.1
Br	INT	10	Au	ND	0.1	Nd	ND	0.1	Se	X	6	V	ND	1
Cd	0.4	0.1	Hf	ND	0.1	Ni	0.6	0.1	Si	40	8	Yb	ND	0.1
Ca	5	7	Ho	ND	0.1	Nb	INT	0.1	Ag	0.8	0.1	Y	ND	0.1
Ce	ND	0.1	I	0.5	0.2	Os	ND	0.1	Na	3.8	1	Zn	ND	2
Cs	ND	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	ND	0.1	Zr	INT	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 USA or +31 20 638 05 97 in Europe.

Intial: wbh
Date: 4/11/07

METALS STANDARD DOCUMENTATION

Standard:	ICP LCS/SPIKE STOCK STD	**ME #:**	0704005
Date Received/Prepped:	4/10/2007	**By:**	wbh
Date Expired:	10/4/2008	**Lot #:**	07D019
Manufacturer:	CPI	**Certificate:**	Y
Matrix:	5% HNO3	**NIST SRM:**	3100 series
Amount:	100mL	**Storage:**	Room Temp

Component	Comment	Conc.	Unit:
Ca	P/N # 4400-130309	10000	ppm
K	per 500mL DI	4000	ppm
Mg		4000	ppm
Na		10000	ppm

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CERTIFICATE OF ANALYSIS

P/N: 4400-130309
Lot Number: 07D019
Shelf Life: 18 months
Expiration Date: 10/04/2008

MZ 07040005

MWH
Dat MW Standard
µg/mL ± 0.5% in 5% HNO_3

Na 10,000 Ca 10,000 Mg 4,000 K 4,000

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.

Intial: WBH
Date: 3/16/07

METALS STANDARD DOCUMENTATION

Standard:	ICP MRL Working stock Solution	**ME #:**	0703010
Date Received/Prepped:	3/16/2007	**By:**	WBH
Date Expired:	9/16/2007	**Lot #:**	
Manufacturer:	MWH-WBH	**Certificate:**	
Matrix:	5% HNO3	**NIST SRM:**	
Amount:	2X100 mL	**Storage:**	Room Temp

Component	Comment	Conc.	Unit:
Al	10mL ME0609001	5	ppm
Sb		5	ppm
As		10	ppm
Ba		2	ppm
Be		0.1	ppm
B		5	ppm
Cd		0.5	ppm
Ca		100	ppm
Cr		1	ppm
Co		5	ppm
Cu		1	ppm
Fe		2	ppm
Pb		2	ppm
Mg		10	ppm
Mn		0.2	ppm
Mo		2	ppm
Ni		2	ppm
K		100	ppm
Se		10	ppm
Ag		1	ppm
Na		100	ppm
Zn		2	ppm
V		0.2	ppm
Tl		10	ppm
Li		0.1	ppm
Ti		2	ppm
Sr		1	ppm
Sn		20	ppm

Intial: WBH
Date: 9/25/06

METALS STANDARD DOCUMENTATION

Standard:	ICP MRL Stock Solution	**ME #:**	0609001
Date Received/Prepped:	9/25/2006	**By:**	WBH
Date Expired:	9/20/2007	**Lot #:**	06I162
Manufacturer:	CPI	**Certificate:**	Yes
Matrix:	2% HNO3 + tr HF	**NIST SRM:**	3100 series
Amount:	100 mL	**Storage:**	Room Temp

Component	Comment	Conc.	Unit:
Al	Part # 4400-060915RH01	50	ppm
Sb		50	ppm
As		100	ppm
Ba		20	ppm
Be		1	ppm
B		50	ppm
Cd		5	ppm
Ca		1000	ppm
Cr		10	ppm
Co		50	ppm
Cu		10	ppm
Fe		20	ppm
Pb		20	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
Zn		20	ppm
V		2	ppm
Tl		10	ppm
Li		1	ppm
Ti		20	ppm
Sr		10	ppm
Sn		200	ppm

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M706090 1

Expiry: 9/20/2007

Certificate of Analysis

Part Number: **4400-060915RH01**
Lot Number: **06I162**
Shelf Life: **12 months**

MWH
Custom Standard
2% HNO3 + tr HF

Concentrations in ug/mL ± 0.5%

Al	50	Pb	20	Zn	20
Sb	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.

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Intial: WBH
Date: 5/16/07

METALS STANDARD DOCUMENTATION

Standard:	Interference Check Std A (ICSA)	**ME #:**	0705012
Date Received/Prepped:	5/16/2007	**By:**	WBH
Date Expired:	8/23/2007	**Lot #:**	VARIOUS
Manufacturer:	MWH-WBH	**Certificate:**	
Matrix:	5% HNO3	**NIST SRM:**	
Amount:	500 mL	**Storage:**	Room Temp.

Component	Comment	Conc. Unit:
Al	25mL ME0603001/500mL	250 ppm
Ca		250 ppm
Fe		100 ppm
Mg		250 ppm

Intial: WBH
Date: 5/16/07

METALS STANDARD DOCUMENTATION

Standard: Interference Check Std AB (ICSAB)
Date Received/Prepped: 5/16/2007
Date Expired: 8/23/2007
Manufacturer: MWH-WBH
Matrix: 5% HNO3
Amount: 500 mL

ME #: 0705013
By: WBH
Lot #: VARIOUS
Certificate:
NIST SRM:
Storage: Room Temp.

Component	Comment	Conc. Unit:
Al	25mL ME0603001/500mL	250 ppm
Ca		250 ppm
Fe		100 ppm
Mg		250 ppm
Ag	25mL ME0603002/500mL	0.5 ppm
Ba	2.5mL @ 5/16/07	0.25 ppm
Be		0.25 ppm
Cd		0.5 ppm
Co		0.25 ppm
Cr		0.25 ppm
Cu		0.25 ppm
Mn		0.25 ppm
Ni		0.5 ppm
Pb		0.5 ppm
V		0.25 ppm
Zn		0.5 ppm

Intial: WBH
Date: 3/2/06

METALS STANDARD DOCUMENTATION

Standard:	ICSB Stock Solution	**ME #:**	0603002
Date Received/Prepped:	3/2/2006	**By:**	WBH
Date Expired:	8/23/2007	**Lot #:**	04L149
Manufacturer:	CPI	**Certificate:**	Y
Matrix:	5% HNO3	**NIST SRM:**	3100 series
Amount:	100 mL	**Storage:**	Room Temp

Component	Comment	Conc.	Unit:
Ag	P/N 4400-INTB1-100	100	ppm
Ba		50	ppm
Be		50	ppm
Cd		100	ppm
Co		50	ppm
Cr		50	ppm
Mn		50	ppm
Ni		100	ppm
Pb		100	ppm
V		50	ppm
Zn		100	ppm
Sb		50	ppm

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MF0603002

CERTIFICATE OF ANALYSIS

P/N 4400-INTB1-100

CLP Analytes B Solution
in 5% HNO_3

Lot # 04L149

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.

Intial: WBH
Date: 3/2/06

METALS STANDARD DOCUMENTATION

Standard:	ICP ICSA Stock solution	**ME #:**	0603001
Date Received/Prepped:	3/2/2006	**By:**	WBH
Date Expired:	8/23/2007	**Lot #:**	06A078
Manufacturer:	CPI	**Certificate:**	Y
Matrix:	5% HNO3	**NIST SRM:**	varius
Amount:	500mL	**Storage:**	Room Temp

Component	Comment	Conc.	Unit:
AL	P/N 4400-INTA1-500	5000	mg/L
CA		5000	mg/L
FE		2000	mg/L
MG		2000	mg/L

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CERTIFICATE OF ANALYSIS

P/N 4400-INTA1-500

CLP Interferents A Solution
in 5% HNO_3

M060301

Lot # 06A078

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.

Intial: DYH
Date: 5/9/07

METALS STANDARD DOCUMENTATION

Standard: ICP QC-25 1PPM
Date Received/Prepped: 5/9/2007
Date Expired: 11/9/2007
Manufacturer: MWH-DYH
Matrix: 5% HNO3
Amount: 500 mL

ME #: 0705005
By: DYH
Lot #: VARIOUS
Certificate:
NIST SRM:
Storage: Room Temp

Component	Comment	Conc.	Unit:
Ag	5mL ME0608006+ 5mL ME0608007 per 500mL DI	1	ppm
Al		1	
B		1	
Ba		1	
Be		1	
Ca		1	
Cd		1	
Co		1	
Cr		1	
Cu		1	
Fe		10	
K		1	
Li		1	
Mg		1	
Mn		1	
Mo		1	
Na		1	
Ni		1	
Pb		1	
Sb		1	
Se		0.5	
Si		1	
Sr		1	
Ti		1	
Tl		1	
V		1	
Zn			

Intial: WBH
Date: 8/31/06

METALS STANDARD DOCUMENTATION

Standard:	QC Check Std 7	**ME #:**	0608007
Date Received/Prepped:	8/31/2006	**By:**	WBH
Date Expired:	8/31/2007	**Lot #:**	062504K
Manufacturer:	Crescent Chemical	**Certificate:**	Y
Matrix:	5% HNO3 + tr. HF	**NIST SRM:**	Various
Amount:	100 mL	Room temp. storage	

Component	Comment	Conc.	Unit:
Ag	QC-007.1	100	ppm
Al		100	ppm
B		100	ppm
Ba		100	ppm
K		1000	ppm
Na		100	ppm
Si		50	ppm

MT060800 7

Laboratory Report - Certificate of Analysis

Environmental Multielement Standard

QC Check Standard 7

CATALOG NO: QC-007.1

CONTENTS: See Below

MATRIX: 5% HNO_3/tr. F^- **LOT NO.:** 062504K

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.

QA Manager

EXPIRES: August 2007

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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Intial: WBH
Date: 8/31/06

METALS STANDARD DOCUMENTATION

Standard:	QC Check Std 21	**ME #:**	0608006
Date Received/Prepped:	8/31/2006	**By:**	WBH
Date Expired:	8/31/2007	**Lot #:**	062504J
Manufacturer:	Crescent Chemical	**Certificate:**	Y
Matrix:	5% HNO3 + tr. Tartaric Acid	**NIST SRM:**	Various
Amount:	100 mL	Room temp. storage	

Component	Comment	Conc.	Unit:
AS	QC-021.1	100	ppm
Be		100	ppm
Ca		100	ppm
Cd		100	ppm
Co		100	ppm
Cr		100	ppm
Cu		100	ppm
Fe		100	ppm
Li		100	ppm
Mg		100	ppm
Mn		100	ppm
Mo		100	ppm
Ni		100	ppm
Pb		100	ppm
Sb		100	ppm
Se		100	ppm
Sr		100	ppm
Ti		100	ppm
Tl		100	ppm
V		100	ppm
Zn		100	ppm

MZ0608006

Laboratory Report - Certificate of Analysis

Environmental Multielement Standard

QC Check Standard 21

CATALOG NO: QC-021.1

CONTENTS: See Below

MATRIX: 5% HNO_3/tr. F⁻/tr. Tartaric Acid **LOT NO.:** 062504J

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.

Linda M. MacIntosh

QA Manager

EXPIRES: August 2007

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Intial: WBH
Date: 5/9/07

METALS STANDARD DOCUMENTATION

Standard:	ICP LINEARITY CHECK	**ME #:**	0705004
Date Received/Prepped:	5/9/2007	**By:**	WBH
Date Expired:	11/9/2007	**Lot #:**	
Manufacturer:	MWH-WBH	**Certificate:**	Y
Matrix:	5% HNO3	**NIST SRM:**	3100 SERIES
Amount:	500mL	**Storage:**	Room Temp

Component	Comment	Conc.	Unit:
CA	15.0mL ME0702002/500mL	300	ppm
K	15.0mL ME0702005/500mL	300	ppm
MG	10.0mL ME0702004/500mL	200	ppm
NA	15.0mL ME0702003/500mL	300	ppm
FE	5.0mL ME0701008/500mL	100	ppm

Intial: WBH
Date: 2/20/07

METALS STANDARD DOCUMENTATION

Standard:	Potassium 10000ppm Stock Std	**ME #:**	0702005
Date Received/Prepped:	2/20/2007	**By:**	WBH
Date Expired:	8/16/2008	**Lot #:**	07B056
Manufacturer:	CPI	**Certificate:**	Y
Matrix:	1% HNO3	**NIST SRM:**	3141
Amount:	250 mL	Room temp. storage	

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

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CERTIFICATE OF ANALYSIS

ME0702005

P/N 4400-10M411
P/N S4400-10M411

Single-Element Potassium Standard
K in 1% HNO_3
10,000 ± 30 µg/mL

Lot # 07B056

Material Source: Potassium Nitrate (KNO_3)
Source Purity: 99.999%
Specific Gravity: 1.019 @ 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 3141. Trace impurities of the standard solution at 1000µg/mL were analyzed by ICP-MS.

	ppb	DL		ppb	DL		ppb	DL		ppb	DL		ppb	DL
Al	0.39	0.1	Cu	0.16	0.1	Pb	ND	0.1	K	X	70	Tl	ND	0.1
Sb	0.34	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	0.14	0.1	Eu	ND	0.1	Mg	2.6	0.2	Rh	ND	0.1	Sn	0.17	0.1
Be	ND	0.1	Gd	ND	0.1	Mn	0.93	1	Rb	9.5	0.1	Ti	ND	0.1
Bi	ND	0.1	Ga	ND	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	ND	0.1	Se	ND	6	V	ND	1
C^a	ND	0.1	Hf	ND	0.1	Ni	0.4	0.1	Si	50	20	Yb	ND	0.1
Ca	82	7	Ho	ND	0.1	Nb	ND	0.1	Ag	ND	0.1	Y	ND	0.1
Ce	ND	0.1	I	ND	0.2	Os	ND	0.1	Na	19	1	Zn	2.9	1
Cs	ND	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	1	0.1	Zr	ND	0.1
Cr	ND	1	Fe	ND	30	P	18	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 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.

Intial: WBH
Date: 2/20/07

METALS STANDARD DOCUMENTATION

Standard:	Magnessium 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	

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

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CERTIFICATE OF ANALYSIS

4/30/2008

P/N 4400-10M311
P/N S4400-10M311

Single-Element Magnesium Standard
Mg in 4% HNO_3
10,000 ± 30 µg/mL

Lot # 07B058

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.

	ppb	DL		ppb	DL		ppb	DL		ppb	DL		ppb	DL
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.

Intial: WBH
Date: 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	

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

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CERTIFICATE OF ANALYSIS

M20702007

P/N 4400-10M521
P/N S4400-10M521

Single-Element Sodium Standard
Na in 1% HNO_3
10,000 ± 30 µg/mL

Lot # 07B057

Material Source: Sodium Nitrate ($NaNO_3$)
Source Purity: 99.99%
Specific Gravity: 1.053 @ 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 3152a. Trace impurities of the standard solution at 1000µg/mL were analyzed by ICP-MS.

	ppb	DL		ppb	DL		ppb	DL		ppb	DL		ppb	DL
Al	1.5	0.1	Cu	0.45	0.1	Pb	ND	0.1	K	ND	70	Tl	ND	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	0.13	0.1	Eu	ND	0.1	Mg	2.3	0.2	Rh	ND	0.1	Sn	ND	0.1
Be	ND	0.1	Gd	ND	0.1	Mn	ND	1	Rb	ND	0.1	Ti	ND	0.1
Bi	ND	0.1	Ga	ND	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	ND	0.1	Se	ND	6	V	ND	1
Cd	ND	0.1	Hf	ND	0.1	Ni	0.4	0.1	Si	50	8	Yb	ND	0.1
Ca	120	7	Ho	ND	0.1	Nb	ND	0.1	Ag	ND	0.1	Y	ND	0.1
Ce	ND	0.1	I	ND	0.2	Os	ND	0.1	Na	X	1	Zn	2.9	2
Cs	ND	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	1	0.1	Zr	ND	0.1
Cr	ND	1	Fe	ND	30	P	18	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 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 United States or +31 20 638 05 97 in Europe.

Intial: WBH
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	

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

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CERTIFICATE OF ANALYSIS

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

1F0702002

Single-Element Calcium Standard
Ca in 4% HNO_3
10,000 ± 30 µg/mL

Lot # 07B065

Material Source: Calcium Carbonate ($CaCO_3$)
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.

	ppb	DL		ppb	DL		ppb	DL		ppb	DL		ppb	DL
Al	7	0.1	Cu	1.7	0.1	Pb	0.23	0.1	K	ND	70	Tl	0.27	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	1.5	0.1	Eu	ND	0.1	Mg	38	0.2	Rh	ND	0.1	Sn	ND	0.1
Be	ND	0.1	Gd	ND	0.1	Mn	ND	1	Rb	ND	0.1	Ti	ND	0.1
Bi	ND	0.1	Ga	ND	0.1	Hg	ND	0.2	Ru	ND	0.1	W	ND	0.1
B	1.5	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	ND	0.1	Se	ND	6	V	ND	1
Cd	ND	0.1	Hf	ND	0.1	Ni	3	0.1	Si	47	8	Yb	ND	0.1
Ca	X	7	Ho	ND	0.1	Nb	ND	0.1	Ag	ND	0.1	Y	ND	0.1
Ce	ND	0.1	I	0.27	0.2	Os	ND	0.1	Na	11.6	1	Zn	3.5	2
Cs	ND	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	55	0.1	Zr	ND	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.

Intial: WBH
Date: 1/27/07

METALS STANDARD DOCUMENTATION

Standard:	FE 10000ppm Stock Std	**ME #:**	701008
Date Received/Prepped:	1/26/2007	**By:**	WBH
Date Expired:	7/19/2008	**Lot #:**	06I143
Manufacturer:	CPI	**Certificate:**	
Matrix:	4% HNO3	**NIST SRM:**	3126a
Amount:	100 mL	**Storage:**	Room Temp

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

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CERTIFICATE OF ANALYSIS

P12070005

P/N 4400-10M261
P/N S4400-10M261

Single-Element Iron Standard
Fe in 4% HNO_3
10,000 ± 30 µg/mL

Lot # 06I143

Material Source: Iron Metal
Source Purity: 99.999%
Specific Gravity: 1.062 @ 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 3126a. Trace impurities of the standard solution at 1000 µg/mL were analyzed by ICP-MS.

	ppb	DL		ppb	DL		ppb	DL		ppb	DL		ppb	DL
Al	INT	0.1	Cu	6.4	0.1	Pb	ND	0.1	K	ND	70	Tl	0.18	0.1
Sb	0.35	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	ND	0.1	Eu	ND	0.1	Mg	1.3	0.2	Rh	ND	0.1	Sn	0.67	0.1
Be	ND	0.1	Gd	ND	0.1	Mn	INT	1	Rb	ND	0.1	Ti	0.21	0.1
Bi	ND	0.1	Ga	0.41	0.1	Hg	ND	0.2	Ru	ND	0.1	W	0.13	0.1
B	ND	4	Ge	INT	0.1	Mo	4.9	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	ND	0.1	Hf	ND	0.1	Ni	9.3	0.1	Si	INT	8	Yb	ND	0.1
Ca	15	7	Ho	ND	0.1	Nb	ND	0.1	Ag	ND	0.1	Y	ND	0.1
Ce	ND	0.1	I	0.34	0.2	Os	ND	0.1	Na	8	1	Zn	8.6	2
Cs	0.34	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	ND	0.1	Zr	ND	0.1
Cr	3.3	1	Fe	X	30	P	28	10	Ta	ND	0.1			
Co	12	0.1	La	ND	0.1	Pt	ND	0.1	Te	ND	0.1			

INT=Interference from Major Element ND=Not 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.

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