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Level IV Data Package

MWH Group 212263

Method: 6010 CR

Sample No.:

2708030224
2708030225
2708030226
2708030227
2708030228
2708030229
2708030230
2708030231
2708030232
2708030233
2708030234
2708030235

EPA 200.7/6010B QC Check List

Analyst WSL Analysis Date 8/13/07 Reviewer/Date VR 8/16/07

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 for Zn MS/MSD "M3"

✓ Special Det Code noted on the cover sheet Cr 6010.

N/A 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 08/08/07

Int: WSL
Date: 8/13/07

Method 200.7/6010

Received by Supervisor on 14-aug-2007
QIR initiated by: wbh

QUALITY INVESTIGATION REPORT **QIR No.:** METL_213188

Analysis date: 081407
Analyst: wbh
Method reference: ML-EPA 601
Analytical instrument: OPTIMA
Extraction Date: 080207
Prepared By: jrf

Group	Sample#	Sample ID	Customer	QC Ref	Test	PM
212263	2708030229	M-101	KERRMCGEE-MP	380840	CR6010	ADE
212263	2708030228	M-102	KERRMCGEE-MP	380840	CR6010	ADE
212263	2708030231	M-84	KERRMCGEE-MP	380840	CR6010	ADE
212263	2708030230	M-86	KERRMCGEE-MP	380840	CR6010	ADE
212263	2708030235	M-10	KERRMCGEE-MP	380840	CR6010	ADE
212263	2708030232	M-100	KERRMCGEE-MP	380840	CR6010	ADE
212263	2708030234	M-11	KERRMCGEE-MP	380840	CR6010	ADE
212263	2708030233	M-36	KERRMCGEE-MP	380840	CR6010	ADE
212267	2708030239	GW-11	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040003	M-70	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040002	M-83	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040001	M-85	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040006	M-22A	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040007	M-38	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040004	M-71	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040005	M-72	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040010	M-115	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040011	M-14A	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040009	M-17A	KERRMCGEE-MP	380840	CR6010	ADE
212281	2708040008	M-89	KERRMCGEE-MP	380840	CR6010	ADE

Brief Description:(include reason for non-compliance-Root Cause)

Sample 2708040006 was used as 2nd set MS/D but recoveries were lower than acceptable limits at 25 and 31percent. Other QCs like LCSDs were passing at 91 and 93%. Another MSD pair was analysed before this set and yielded 78 and 72%. This was sample 2708040004.

Corrective Action Taken/Prevention:

Matris interference is suspect also a high sample concentration because spike value is at 1 and sample value is +/- 30.

Impact on Data Quality:

None as all other QCs pass.
LIMS user:mce Date/time stamp:24-aug-2007 15:42:38

Data Disposition/Acceptable/Method/Regulations:

Flag sample -0006 with M3 since sample result is 30x of spiked amount. Batch data acceptable based on passing LCSs and 1st MS/MSD.
LIMS user:yyc Date/time stamp:24-aug-2007 17:52:09

Annotation:

M3 - The accuracy of the spike recovery value is reduced since the analyte concentration in the sample is disproportionate to the spike level. The method control sample recovery was acceptable.
LIMS user:yyc Date/time stamp:24-aug-2007 17:52:09

Client Contact:

ok to report with M3 flag for impacted sample.
LIMS user:ade Date/time stamp:25-aug-2007 08:47:10

Detail Report for QIR group# 213188

Group	Sample#	Sample ID	Customer	QC Ref	Test	Analyst	Analysis Date	Prep	Prep Date	Inst
212263	2708030228	M-102	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212263	2708030229	M-101	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212263	2708030230	M-86	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212263	2708030231	M-84	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212263	2708030232	M-100	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212263	2708030233	M-36	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212263	2708030234	M-11	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212263	2708030235	M-10	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212267	2708030239	GW-11	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040001	M-85	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040002	M-83	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040003	M-70	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040004	M-71	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040005	M-72	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040006	M-22A	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040007	M-38	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040008	M-89	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040009	M-17A	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040010	M-115	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA
212281	2708040011	M-14A	KERRMCGEE-MP	380840	CR6010	wbh	08/14/07 00:00	jrf	08/12/07 00:00	OPTIMA

Batch# 380840 CR6010

Analyte	QC	Actual	Found	Lower	Yield	Upper	Statu
Chromium, Total, ICAP	LCS1	1.00	0.914	85.0	91.4	115.0	OK
Chromium, Total, ICAP	LCS2	1.00	0.934	85.0	93.4	115.0	OK
Chromium, Total, ICAP	MBLK	ND	ND	0.0		0.0	OK
Chromium, Total, ICAP	MRL_CHK	0.010	0.009	50.0	99.4	150.0	OK
Chromium, Total, ICAP	MS	1.00	0.783	70.0	78.3	130.0	OK
Chromium, Total, ICAP	MSD	1.00	0.716	70.0	71.6	130.0	OK

File ID: 070813A

CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
ICV	8/13/07	19:11	1	9.9636	9.96	95-105	99.6%
LINEARITY	8/13/07	19:14	1	0.0016	.0016		
ICSA	8/13/07	19:18	1	-0.0011	ND	80-120	
ICSAB	8/13/07	19:22	1	.23743	.237	80-120	94.9%
Wash	8/13/07	19:26	1	-0.0001	ND		
QC-25 1ppm	8/13/07	19:32	1	.95734	.960		
CCV	8/13/07	19:37	1	4.9148	4.91	90-110	98.2%
ICB	8/13/07	19:48	1	0.0000	0.0000		
MRL	8/13/07	19:54	1	0.0098	.0098	50-150	97.5%
FILTER_CHECK	8/13/07	19:57	1	-0.0002	ND		
MRL6010	8/13/07	20:01	1	~~-0.0027~~	~~ND~~	No Sx. Wrong Sx location. See Rerun 8/14/07	
MBLANK	8/13/07	20:05	1	-0.0001	ND		
LCS	8/13/07	20:08	1	.95525	.955	85-115	95.5%
LCSD	8/13/07	20:12	1	.94145	.941	85-115	94.1%
2708020271_2X	8/13/07	20:16	2	.21518	.220		
2708020271_2XMS	8/13/07	20:20	2	1.1761	1.18	[0.961]	~~48.0~~ Q
2708020271_2XMSD	8/13/07	20:24	2	1.1556	1.16	[0.941]	~~47.0~~ Q
2708020271_2XT	8/13/07	20:24	2		2.00	70 - 130	
2708020272_2X	8/13/07	20:28	2	.48722	.490		
2708020272_2XMS	8/13/07	20:32	2	1.4206	1.42	[0.933]	~~46.6~~ Q
CCV	8/13/07	20:36	1	4.8635	4.86	90-110	97.2%
CCB	8/13/07	20:39	1	0.0000	0.0000		
2708020272_2XMSD	8/13/07	20:43	2	1.4252	1.43	[0.938]	~~46.9~~ Q
2708020272_2XT	8/13/07	20:43	2		2.00	70 - 130	
2708020256_20X	8/13/07	20:46	20	29.366	29		
2708020257_20X	8/13/07	20:51	20	28.933	29		
2708020258_20X	8/13/07	20:55	20	16.424	16		
2708020259_20X	8/13/07	20:59	20	43.453	43		
2708020260_20X	8/13/07	21:04	20	30.262	30		
2708020261_20X	8/13/07	21:08	20	30.987	31		
2708020262_20X	8/13/07	21:12	20	25.971	26		
2708020263_20X	8/13/07	21:17	20	14.973	15		
2708020264_20X	8/13/07	21:21	20	12.622	13		
CCV	8/13/07	21:25	1	4.7959	4.8	90-110	95.9%
CCB	8/13/07	21:29	1	0.0022	.0022		
MCV	8/13/07	21:32	1	2.3859	2.39	90-110	95.4%
2708020265_10X	8/13/07	21:35	10	11.131	11		
2708020266_10X	8/13/07	21:40	10	9.4001	9.4		
2708020267_5X	8/13/07	21:44	5	4.3750	4.4		
2708020268_2X	8/13/07	21:48	2	1.8711	1.9		
2708020269_2X	8/13/07	21:53	2	.79782	.8		
2708020270_2X	8/13/07	21:57	2	.44294	.440		
2708020317_2X	8/13/07	22:02	2	0.0161	.016		
2708020319_5X	8/13/07	22:06	5	11.356	11		
2708020318_2X	8/13/07	22:11	2	.06087	.061		
MBLANK	8/13/07	22:15	1	0.0007	0.0007		

File ID: 070813A

CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
CCV	8/13/07	22:19	1	4.7548	4.75	90-110	95.0%
CCB	8/13/07	22:24	1	0.0009	0.0009		
LCS	8/13/07	22:28	1	.93005	.93	85-115	93.0%
LCSD	8/13/07	22:31	1	.91146	.911	85-115	91.1%
2708020327_2X	8/13/07	22:34	2	.96783	.970		
2708020327_2XMS	8/13/07	22:38	2	1.8816	1.88	[0.914] 45.6 Q	
2708020327_2XMSD	8/13/07	22:42	2	1.8625	1.86	[0.895] 44.7 Q	
2708020327_2XT	8/13/07	22:42	2		2.00	70 - 130	
2708020332_20X	8/13/07	22:46	20	21.102	21		
2708020332_20XMS	8/13/07	22:50	20	21.300	21.3	[0.198] 9.91 Q	
2708020332_20XMSD	8/13/07	22:55	20	21.963	22	[0.861] 4.30 Q	
2708020332_20XT	8/13/07	22:55	20		20.00	70 - 130	
2708020320_20X	8/13/07	22:59	20	29.441	29		
2708020321_20X	8/13/07	23:03	20	15.929	16		
CCV	8/13/07	23:08	1	4.7324	4.73	90-110	94.6%
CCB	8/13/07	23:11	1	0.0022	.0022		
MCV	8/13/07	23:16	1	2.3620	2.36	90-110	94.4%
2708020322_10X	8/13/07	23:19	10	9.4485	9.4		
2708020323_2X	8/13/07	23:24	2	.38131	.380		
2708020324_5X	8/13/07	23:28	5	4.5793	4.6		
2708020325_2X	8/13/07	23:32	2	.91385	.910		
2708020326_2X	8/13/07	23:37	2	1.0224	1.0		
2708020328_2X	8/13/07	23:41	2	2.3597	2.4		
2708020329_5X	8/13/07	23:46	5	9.4749	9.5		
2708020330_5X	8/13/07	23:50	5	5.5403	5.5		
2708020331_20X	8/13/07	23:54	20	19.785	20		
2708020342_10X	8/13/07	23:59	10	12.578	13		
CCV	8/14/07	0:05	1	4.7427	4.74	90-110	94.8%
CCB	8/14/07	0:13	1	0.0010	.001		
2708020343_2X	8/14/07	0:17	2	0.0033	.0033		
2708020344_5X	8/14/07	0:20	5	11.969	12		
2708030224_2X	8/14/07	0:25	2	1.8657	1.9		
2708030225_2X	8/14/07	0:29	2	.76172	.760		
2708030226_2X	8/14/07	0:34	2	2.8850	2.9		
2708030227_2X	8/14/07	0:38	2	.87133	.870		
MBLANK	8/14/07	0:43	1	0.0006	0.0005		
LCS	8/14/07	0:46	1	.91435	.914	85-115	91.4%
LCSD	8/14/07	0:50	1	.93482	.935	85-115	93.4%
2708040004_5X	8/14/07	0:54	5	5.0792	5.1		
CCV	8/14/07	1:01	1	4.7245	4.72	90-110	94.4%
CCB	8/14/07	1:10	1	0.0003	0.0002		
MCV	8/14/07	1:15	1	2.3292	2.33	90-110	93.1%
2708040004_5XMS	8/14/07	1:18	5	5.8624	5.86	[0.783] 15.6 Q	
2708040004_5XMSD	8/14/07	1:22	5	5.7952	5.8	[0.716] 14.3 Q	
2708040004_5XT	8/14/07	1:22	5		5.00	70 - 130	
2708040006_20X	8/14/07	1:27	20	29.675	30		
2708040006_20XMS	8/14/07	1:31	20	29.922	29.9	[0.247] 1.23 Q	
2708040006_20XMSD	8/14/07	1:35	20	29.989	30	[0.314] 1.57 Q	
2708040006_20XT	8/14/07	1:35	20		20.00	70 - 130	
2708030228_2X	8/14/07	1:40	2	1.3358	1.3		

File ID: 070813A

CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
2708030229_2X	8/14/07	1:44	2	.46897	.470		
2708030230_2X	8/14/07	1:49	2	1.7594	1.8		
2708030231_2X	8/14/07	1:53	2	0.0797	.080		
2708030232_2X	8/14/07	1:57	2	.19337	.190		
CCV	8/14/07	2:05	1	4.7200	4.72	90-110	94.4%
CCB	8/14/07	2:11	1	0.0003	0.0003		
2708030233_20X	8/14/07	2:14	20	32.887	33		
2708030234_2X	8/14/07	2:19	2	2.5954	2.6		
2708030235_2X	8/14/07	2:23	2	.96589	.970		
2708030239_5X	8/14/07	2:27	5	0.0419	.042		
2708040001_2X	8/14/07	2:31	2	0.0746	.075		
2708040002_2X	8/14/07	2:36	2	0.0933	.093		
2708040003_5X	8/14/07	2:40	5	7.4532	7.5		
2708040005_5X	8/14/07	2:45	5	4.7907	4.8		
2708040007_20X	8/14/07	2:49	20	25.929	26		
2708040008_20X	8/14/07	2:53	20	22.921	23		
CCV	8/14/07	3:01	1	4.7569	4.76	90-110	95.1%
CCB	8/14/07	3:10	1	0.0008	0.0007		
MCV	8/14/07	3:15	1	2.3193	2.32	90-110	92.7%
2708040009_20X	8/14/07	3:19	20	27.091	27		
2708040010_2X	8/14/07	3:24	2	0.0357	.036		
2708040011_2X	8/14/07	3:28	2	0.0534	.053		
ICSA	8/14/07	3:33	1	-0.0009	ND	80-120	
ICSAB	8/14/07	3:37	1	.22613	.226	80-120	90.4%
Wash	8/14/07	3:41	1	0.0000	0		
QC-25 1ppm	8/14/07	3:47	1	.19770	.2		
ECV	8/14/07	3:52	1	4.6691	4.67	90-110	93.3%
ECB	8/14/07	3:59	1	-0.0003	ND		
MRL	8/14/07	4:05	1	0.0090	.009	50-150	90.4%

GA 21228

ICP SUMMARY SHEET

File ID: 070813A
Date Started: 8/13/07
Analyst ID: WBH

SAMPLE ID

LINEARITY	(19:14)	Wash	(19:26)	FILTER_CHECK	(19:57)
2708020271_2	(20:16)	2708020272_2	(20:28)	2708020256_2	(20:46)
2708020257_2	(20:51)	2708020258_2	(20:55)	2708020259_2	(20:59)
2708020260_2	(21:04)	2708020261_2	(21:08)	2708020262_2	(21:12)
2708020263_2	(21:17)	2708020264_2	(21:21)	2708020265_1	(21:35)
2708020266_1	(21:40)	2708020267_5	(21:44)	2708020268_2	(21:48)
2708020269_2	(21:53)	2708020270_2	(21:57)	2708020317_2	(22:02)
2708020319_5	(22:06)	2708020318_2	(22:11)	2708020327_2	(22:34)
2708020332_2	(22:46)	2708020320_2	(22:59)	2708020321_2	(23:03)
2708020322_1	(23:19)	2708020323_2	(23:24)	2708020324_5	(23:28)
2708020325_2	(23:32)	2708020326_2	(23:37)	2708020328_2	(23:41)
2708020329_5	(23:46)	2708020330_5	(23:50)	2708020331_2	(23:54)
2708020342_1	(23:59)	2708020343_2	(0:17)	2708020344_5	(0:20)
2708030224_2	(0:25)	2708030225_2	(0:29)	2708030226_2	(0:34)
2708030227_2	(0:38)	2708040004_5	(0:54)	2708040006_2	(1:27)
2708030228_2	(1:40)	2708030229_2	(1:44)	2708030230_2	(1:49)
2708030231_2	(1:53)	2708030232_2	(1:57)	2708030233_2	(2:14)
2708030234_2	(2:19)	2708030235_2	(2:23)	2708030239_5	(2:27)
2708040001_2	(2:31)	2708040002_2	(2:36)	2708040003_5	(2:40)
2708040005_5	(2:45)	2708040007_2	(2:49)	2708040008_2	(2:53)
2708040009_2	(3:19)	2708040010_2	(3:24)	2708040011_2	(3:28)
Wash	(3:41)				

Cr6010

COMMENT: MRL for Cr6010 ⇒ 0.00994 mg/L.

Analyst: WBJ

Approved By: WR 8/16/07

BATCH NUMBER for 070813A

Test Parameter:

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

Batch ID: 2708020271_2X

2708020271_2X	2708020272_2X	2708020256_20X
2708020257_20X	2708020258_20X	2708020259_20X
2708020260_20X	2708020261_20X	2708020262_20X
2708020263_20X	2708020264_20X	2708020265_10X
2708020266_10X	2708020267_5X	2708020268_2X
2708020269_2X	2708020270_2X	2708020317_2X
2708020319_5X	2708020318_2X	

Batch ID: 2708020327_2X

2708020327_2X	2708020332_20X	2708020320_20X
2708020321_20X	2708020322_10X	2708020323_2X
2708020324_5X	2708020325_2X	2708020326_2X
2708020328_2X	2708020329_5X	2708020330_5X
2708020331_20X	2708020342_10X	2708020343_2X
2708020344_5X	2708030224_2X	2708030225_2X
2708030226_2X	2708030227_2X	

Batch ID: 2708040004_5X

2708040004_5X	2708040006_20X	2708030228_2X
2708030229_2X	2708030230_2X	2708030231_2X
2708030232_2X	2708030233_20X	2708030234_2X
2708030235_2X	2708030239_5X	2708040001_2X
2708040002_2X	2708040003_5X	2708040005_5X
2708040007_20X	2708040008_20X	2708040009_20X
2708040010_2X	2708040011_2X	

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Sample ID	Time	CR	CU	FE	K	MG	MN	MO	NA	NI	PB	SB
ICV	19:11	9.96/10	10.1/10	10.0/10	101/100	102/100	10.0/10	%10.00/10	103/100	9.98/10	10.3/10	10.1/10
LINEARITY	19:14	0.002	-.015	101	316	200	0.004	0.002	319/300	0.001	-.007	0.013
ICSA	19:18	-.001	-.016	100/100	0.390	254/250	0.003	0.003	0.186	-.000	-.046	0.010
ICSAB	19:22	0.237/.25	0.233/.25	97.0/100	0.168	244/250	0.250/.25	0.002	0.066	0.449/.5	0.440/.5	0.011
Wash	19:26	-.0001	0.0000	-.0021	0.0007	0.0009	-.0004	-.0002	0.0192	-.0001	0.0010	-.0058
QC-25 1ppm	19:32	0.9573	0.9309	1.014	9.552	1.078	0.9991	0.9150	1.052	1.005	1.032	0.9333
CCV	19:37	4.91/5	4.77/5	5.16/5	49.7/50	52.4/50	5.02/5	4.88/5	51.7/50	5.06/5	5.12/5	4.92/5
ICB	19:48	0.0000	0.0002	0.0001	-.0034	0.0008	-.0004	0.0001	0.0111	0.0000	0.0015	-.0025
MRL	19:54	0.010/.01	0.010/.01	0.021/.02	0.902/1	0.107/.1	N/A	0.019/.02	1.04/1	0.020/.02	0.022/.02	N/A
FILTER_CHECK	19:57	-.0002	-.0001	-.0011	-.0646	0.0001	N/A	-.0003	0.0038	-.0000	0.0018	N/A
MRL6010	20:01	-.003	-.007	-.003	-.029	-.000	N/A	-.001	-.000	-.000	0.007(.02)	N/A
MBLANK	20:05	-.0001	-.0001	0.0016	-.0656	0.0045	N/A	-.0000	0.0247	-.0000	0.0024	N/A
LCS	20:08	0.955/1	0.961/1	5.03/5	19.3/20	20.6/20	N/A	0.953/1	51.0/50	0.498/.5	1.04/1	N/A
LCSD	20:12	0.941/1	0.956/1	5.07/5	19.6/20	20.7/20	N/A	0.933/1	51.1/50	0.487/.5	1.02/1	N/A
2708020271_2X	20:16	0.2152	0.0046	0.0014	35.25	181.5	N/A	0.0275	880.6	-.0015	-.0082	N/A
2708020271_2XMS	20:20	1.176	1.007	5.318	57.15	201.2	N/A	0.9954	924.9	0.4808	1.019	N/A
2708020271_2XMSD	20:24	1.156	0.9911	5.153	56.01	198.6	N/A	0.9852	913.7	0.4742	0.9896	N/A
2708020272_2X	20:28	0.4872	0.0042	0.3238	46.57	214.6	N/A	0.0301	856.1	0.0009	-.0129	N/A
2708020272_2XMS	20:32	1.421	0.9819	5.469	66.09	228.0	N/A	0.9981	882.7	0.4698	0.9949	N/A
CCV	20:36	4.86/5	4.72/5	5.02/5	49.1/50	52.4/50	N/A	4.77/5	51.8/50	4.98/5	5.04/5	N/A
CCB	20:39	0.0000	0.0001	0.0012	0.0133	-.0001	N/A	0.0006	0.1645	-.0001	0.0026	N/A
2708020272_2XMSD	20:43	1.425	0.9781	5.421	66.67	232.0	N/A	0.9777	898.7	0.4606	0.9758	N/A
2708020256_20X	20:46	29.37	0.0149	0.0959	55.77	529.6	N/A	0.0342	%2374.2	-.0032	-.0329	N/A
2708020257_20X	20:51	28.93	0.0132	0.0334	46.83	564.4	N/A	0.0363	%2336.3	-.0040	-.0493	N/A
2708020258_20X	20:55	16.42	0.0091	0.1123	41.79	462.1	N/A	0.0456	%1655.3	-.0034	-.0080	N/A
2708020259_20X	20:59	43.45	0.0523	23.27	53.91	664.0	N/A	0.0253	%2330.0	0.1392	-.0547	N/A
2708020260_20X	21:04	30.26	0.0364	0.9707	54.77	651.7	N/A	0.0373	%2318.1	-.0038	-.0596	N/A
2708020261_20X	21:08	30.99	0.0110	0.0027	45.47	624.0	N/A	0.0392	%2290.3	-.0068	-.0876	N/A
2708020262_20X	21:12	25.97	0.0091	-.0300	36.73	492.3	N/A	0.0311	%2334.0	0.0039	-.0390	N/A
2708020263_20X	21:17	14.97	0.0013	-.0169	47.11	433.5	N/A	0.0260	%1901.8	-.0028	-.0308	N/A
2708020264_20X	21:21	12.62	0.0060	0.3496	35.36	388.5	N/A	0.0269	%1710.5	0.0005	-.0399	N/A
CCV	21:25	4.80/5	4.63/5	5.16/5	50.2/50	53.0/50	N/A	4.75/5	52.0/50	5.00/5	5.03/5	N/A
CCB	21:29	0.0022	-.0001	-.0012	-.0200	-.0000	N/A	0.0008	0.1064	-.0001	0.0019	N/A
MCV	21:32	2.39/2.5	2.28/2.5	2.58/2.5	24.6/25	26.8/25	N/A	2.32/2.5	26.0/25	2.50/2.5	2.51/2.5	N/A
2708020265_10X	21:35	11.13	0.0058	0.0157	43.19	330.3	N/A	0.0289	%1733.6	-.0017	-.0306	N/A
2708020266_10X	21:40	9.400	0.0053	1.122	40.64	295.8	N/A	0.0303	%1853.6	0.0003	0.0038	N/A
2708020267_5X	21:44	4.375	0.0051	0.0080	38.68	224.6	N/A	0.0321	%1597.4	-.0033	-.0220	N/A
2708020268_2X	21:48	1.871	0.0028	0.0024	32.71	164.5	N/A	0.0341	%1292.4	-.0006	-.0099	N/A
2708020269_2X	21:53	0.7978	0.0029	0.0069	39.80	221.9	N/A	0.0272	%1196.9	0.0002	-.0104	N/A
2708020270_2X	21:57	0.4429	0.0032	0.0300	45.51	265.4	N/A	0.0206	%1115.3	-.0004	-.0178	N/A
2708020317_2X	22:02	0.0161	0.0024	0.1847	12.01	84.40	N/A	0.0168	359.6	-.0006	-.0043	N/A
2708020319_5X	22:06	11.36	0.0090	0.1397	23.07	278.3	N/A	0.0162	%1642.2	-.0007	-.0139	N/A
2708020318_2X	22:11	0.0609	0.0059	0.0744	18.58	199.2	N/A	0.0175	636.5	0.0004	-.0028	N/A
MBLANK	22:15	0.0007	-.0003	0.0015	-.0280	0.0019	N/A	-.0004	0.4622	-.0006	0.0020	N/A
CCV	22:19	4.75/5	4.55/5	4.99/5	48.9/50	53.2/50	N/A	4.61/5	51.9/50	4.86/5	4.90/5	N/A
CCB	22:24	0.0009	-.0002	-.0004	-.0450	0.0009	N/A	0.0002	0.1693	-.0003	0.0019	N/A
LCS	22:28	0.930/1	0.917/1	5.08/5	19.4/20	20.8/20	N/A	0.902/1	49.8/50	0.474/.5	0.975/1	N/A
LCSD	22:31	0.911/1	0.904/1	5.04/5	19.4/20	20.8/20	N/A	0.902/1	50.0/50	0.474/.5	0.984/1	N/A
2708020327_2X	22:34	0.9678	0.0022	0.0086	21.47	268.7	N/A	0.0615	912.8	0.0001	-.0147	N/A

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Sample ID	Time	CR	CU	FE	K	MG	MN	MO	NA	NI	PB	SB
2708020327_2XMS	22:38	1.882	0.9429	5.014	42.70	292.7	N/A	0.9687	983.4	0.4596	0.9289	N/A
2708020327_2XMSD	22:42	1.863	0.9330	4.987	42.32	288.6	N/A	0.9594	963.1	0.4556	0.9215	N/A
2708020332_20X	22:46	21.10	-.0003	0.0486	64.93	523.8	N/A	0.0359	%1908.6	-.0008	-.0471	N/A
2708020332_20XMS	22:50	21.30	0.8765	5.050	81.93	519.2	N/A	0.9212	%1874.3	0.4537	0.9266	N/A
2708020332_20XMSD	22:55	21.96	0.9208	5.140	82.61	532.0	N/A	0.9569	%1916.9	0.4689	0.9693	N/A
2708020320_20X	22:59	29.44	-.0017	1.021	35.17	292.8	N/A	0.0423	%2968.5	-.0009	-.0043	N/A
2708020321_20X	23:03	15.93	0.0044	-.0146	43.52	392.1	N/A	0.0385	%1711.6	-.0063	-.0264	N/A
CCV	23:08	4.73/5	4.52/5	5.08/5	49.8/50	53.4/50	N/A	4.62/5	51.5/50	4.87/5	4.90/5	N/A
CCB	23:11	0.0022	-.0001	-.0012	-.0423	-.0000	N/A	0.0008	0.1601	-.0002	0.0011	N/A
MCV	23:16	2.36/2.5	2.24(2.5)	2.64/2.5	25.5/25	27.2/25	N/A	2.29/2.5	25.8/25	2.47/2.5	2.47/2.5	N/A
2708020322_10X	23:19	9.449	0.0041	-.0099	82.14	254.6	N/A	0.0599	%1309.1	-.0010	-.0134	N/A
2708020323_2X	23:24	0.3813	0.0029	0.0302	10.88	157.8	N/A	0.1619	%1123.3	0.0047	-.0124	N/A
2708020324_5X	23:28	4.579	0.0031	0.0612	26.96	440.5	N/A	0.0220	895.4	-.0030	-.0211	N/A
2708020325_2X	23:32	0.9139	0.0037	0.2015	26.30	313.5	N/A	0.0951	%1244.8	0.0016	-.0134	N/A
2708020326_2X	23:37	1.022	0.0019	0.0336	19.26	274.5	N/A	0.0419	843.2	0.0002	-.0154	N/A
2708020328_2X	23:41	2.360	0.0026	-.0126	20.40	333.7	N/A	0.0300	900.9	0.0015	-.0145	N/A
2708020329_5X	23:46	9.475	0.0020	0.0023	38.00	464.0	N/A	0.0264	%1241.8	0.0003	-.0175	N/A
2708020330_5X	23:50	5.540	0.0023	0.0405	26.77	454.3	N/A	0.0234	947.7	-.0012	-.0226	N/A
2708020331_20X	23:54	19.79	-.0021	0.0282	71.66	477.9	N/A	0.0364	%1974.2	0.0026	-.0291	N/A
2708020342_10X	23:59	12.58	0.0063	0.4790	45.70	21.55	N/A	0.0286	%2325.5	-.0024	0.0005	N/A
CCV	0:05	4.74/5	4.53/5	5.09/5	49.5/50	53.9/50	N/A	4.64/5	51.4/50	4.90/5	4.93/5	N/A
CCB	0:13	0.0010	-.0006	-.0003	-.0776	0.0012	N/A	0.0001	0.1676	-.0006	0.0012	N/A
2708020343_2X	0:17	0.0033	-.0001	0.0878	-.0686	0.2255	N/A	0.0004	0.6041	-.0004	0.0057	N/A
2708020344_5X	0:20	11.97	0.0037	0.3767	46.00	20.45	N/A	0.0327	%2254.1	-.0005	-.0026	N/A
2708030224_2X	0:25	1.866	0.0018	0.1374	12.70	101.0	N/A	0.0148	426.0	0.0002	-.0028	N/A
2708030225_2X	0:29	0.7617	0.0024	-.0041	24.21	258.0	N/A	0.1031	%1334.7	0.0009	-.0133	N/A
2708030226_2X	0:34	2.885	0.0019	0.1220	15.67	193.3	N/A	0.0165	471.5	-.0008	-.0101	N/A
2708030227_2X	0:38	0.8713	0.0031	0.0487	25.41	232.5	N/A	0.1180	%1544.2	0.0021	-.0140	N/A
MBLANK	0:43	0.0006	-.0007	0.0021	-.0721	0.0049	N/A	-.0004	0.5792	-.0005	0.0030	N/A
LCS	0:46	0.914/1	0.895/1	5.02/5	19.9/20	21.6/20	N/A	0.885/1	52.0/50	0.468/.5	0.965/1	N/A
LCSD	0:50	0.935/1	0.913/1	5.16/5	19.8/20	21.5/20	N/A	0.911/1	51.4/50	0.482/.5	0.985/1	N/A
2708040004_5X	0:54	5.079	0.0021	0.0148	25.81	271.9	N/A	0.0219	%1151.5	-.0036	-.0199	N/A
CCV	1:01	4.72/5	4.47(5)	5.13/5	50.4/50	54.0/50	N/A	4.59/5	51.8/50	4.86/5	4.87/5	N/A
CCB	1:10	0.0003	-.0006	-.0024	-.0700	0.0014	N/A	0.0002	0.1596	-.0007	0.0019	N/A
MCV	1:15	2.33/2.5	2.18(2.5)	2.58/2.5	25.0/25	27.3/25	N/A	2.24(2.5)	25.9/25	2.44/2.5	2.43/2.5	N/A
2708040004_5XMS	1:18	5.862	0.9216	5.191	46.41	288.0	N/A	0.9297	%1184.2	0.4617	0.9530	N/A
2708040004_5XMSD	1:22	5.795	0.9069	4.997	45.31	283.3	N/A	0.8934	%1156.9	0.4460	0.9158	N/A
2708040006_20X	1:27	29.68	-.0029	-.0096	41.55	508.1	N/A	0.0314	%2459.3	-.0099	-.0232	N/A
2708040006_20XMS	1:31	29.92	0.8867	5.092	58.08	515.6	N/A	0.9242	%2439.7	0.4550	0.9315	N/A
2708040006_20XMSD	1:35	29.99	0.8866	5.158	59.40	522.2	N/A	0.9194	%2475.4	0.4532	0.9137	N/A
2708030228_2X	1:40	1.336	0.0011	0.1122	9.807	85.01	N/A	0.0152	416.8	-.0002	-.0024	N/A
2708030229_2X	1:44	0.4690	0.0033	0.0796	9.126	92.07	N/A	0.0103	536.2	-.0012	-.0062	N/A
2708030230_2X	1:49	1.759	0.0010	0.0315	14.75	157.4	N/A	0.0129	521.1	-.0017	-.0104	N/A
2708030231_2X	1:53	0.0797	0.0004	0.0261	4.837	30.06	N/A	0.0103	158.7	-.0014	-.0019	N/A
2708030232_2X	1:57	0.1934	0.0005	0.0892	6.452	54.89	N/A	0.0107	289.6	-.0003	-.0023	N/A
CCV	2:05	4.72/5	4.46(5)	5.21/5	51.3/50	54.4/50	N/A	4.59/5	52.2/50	4.88/5	4.86/5	N/A
CCB	2:11	0.0003	-.0006	-.0017	-.0095	0.0007	N/A	0.0004	0.1268	-.0005	0.0030	N/A
2708030233_20X	2:14	32.89	-.0003	0.2271	37.08	515.3	N/A	0.0404	%2669.2	-.0097	-.0297	N/A
2708030234_2X	2:19	2.595	0.0007	0.8022	21.15	43.32	N/A	0.0238	986.5	-.0007	-.0009	N/A
2708030235_2X	2:23	0.9659	0.0000	4.864	14.61	128.5	N/A	0.0173	608.3	-.0019	-.0065	N/A

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Sample ID	Time	CR	CU	FE	K	MG	MN	MO	NA	NI	PB	SB
2708030239_5X	2:27	0.0419	0.0197	0.1604	159.9	%1147.9	N/A	0.5230	%7911.1	0.0550	-.0366	N/A
2708040001_2X	2:31	0.0746	0.0000	0.0367	5.634	38.81	N/A	0.0083	176.6	-.0014	-.0028	N/A
2708040002_2X	2:36	0.0933	0.0022	0.0685	4.179	28.90	N/A	0.0094	147.8	-.0015	-.0006	N/A
2708040003_5X	2:40	7.453	0.0019	0.0151	29.49	267.3	N/A	0.0188	%1686.5	-.0041	-.0132	N/A
2708040005_5X	2:45	4.791	0.0027	0.1978	36.20	336.1	N/A	0.0281	%1290.5	-.0003	-.0230	N/A
2708040007_20X	2:49	25.93	-.0061	0.0999	41.88	454.4	N/A	0.0228	%2384.1	-.0173	0.0042	N/A
2708040008_20X	2:53	22.92	-.0062	-.0077	38.59	447.0	N/A	0.0278	%2165.5	-.0174	-.0185	N/A
CCV	3:01	4.76/5	4.49(5)	5.18/5	51.2/50	54.9/50	N/A	4.61/5	52.7/50	4.89/5	4.89/5	N/A
CCB	3:10	0.0008	-.0007	-.0007	-.0821	0.0017	N/A	0.0002	0.1332	-.0008	0.0028	N/A
MCV	3:15	2.32/2.5	2.16(2.5)	2.59/2.5	25.5/25	27.6(25)	N/A	2.19(2.5)	26.3/25	2.39/2.5	2.37/2.5	N/A
2708040009_20X	3:19	27.09	-.0024	0.0632	37.67	424.5	N/A	0.0581	%2465.2	-.0154	-.0251	N/A
2708040010_2X	3:24	0.0357	0.0007	0.0552	14.12	138.2	N/A	0.0270	518.1	-.0024	-.0057	N/A
2708040011_2X	3:28	0.0534	0.0016	0.3418	9.994	162.1	N/A	0.0131	637.2	-.0005	-.0063	N/A
ICSA	3:33	-.001	-.015	99.2/100	0.063	257/250	N/A	0.002	0.776	-.001	-.038	N/A
ICSAB	3:37	0.226/.25	0.212/.25	97.2/100	-.011	250/250	N/A	0.002	0.465	0.424/.5	0.408/.5	N/A
Wash	3:41	0.0000	-.0009	-.0005	-.0796	0.0008	N/A	-.0003	0.1691	-.0006	0.0034	N/A
QC-25 1ppm	3:47	0.1977	0.1790	1.022	9.823	1.128	N/A	0.0093	1.284	0.0093	0.0199	N/A
ECV	3:52	4.67/5	4.41(5)	5.24/5	52.0/50	54.4/50	N/A	4.50/5	52.5/50	4.78/5	4.76/5	N/A
ECB	3:59	-.0003	-.0008	0.0006	-.0818	0.0001	N/A	0.0001	0.0989	-.0007	0.0026	N/A
MRL	4:05	0.009/.01	0.008/.01	0.022/.02	0.918/1	0.112/.1	N/A	0.017/.02	1.11/1	0.019/.02	0.022/.02	N/A

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	332357.3
-1.6	15.0	451683.8
-1.2	15.0	590002.7
-0.8	15.0	728483.9
-0.4	15.0	819616.4
0.0	15.0	824559.1
0.4	15.0	798705.8
0.8	15.0	673091.0
1.2	15.0	547644.5
1.6	15.0	418050.5
2.0	15.0	292380.9
0.0	10.0	6732.8
0.0	10.5	18151.5
0.0	11.0	29878.4
0.0	11.5	47226.7
0.0	12.0	74779.1
0.0	12.5	178059.6
0.0	13.0	261061.7
0.0	13.5	361162.6
0.0	14.0	500029.9
0.0	14.5	751190.4
0.0	15.0	835082.7
0.0	15.5	722693.9
0.0	16.0	673038.3
0.0	16.5	485847.3
0.0	17.0	392956.9
0.0	17.5	286593.9
0.0	18.0	218974.3
0.0	18.5	142388.0
0.0	19.0	39918.9
0.0	19.5	18136.3
0.0	20.0	7888.2
-0.8	15.0	653111.3
-0.4	15.0	716739.4
0.0	15.0	752703.9
0.4	15.0	714987.1
0.8	15.0	576721.1
0.0	13.0	234818.2
0.0	13.5	307689.7
0.0	14.0	421459.9
0.0	14.5	634824.2
0.0	15.0	728686.1
0.0	15.5	765318.3
0.0	16.0	736690.8
0.0	16.5	540067.9
0.0	17.0	383443.8

8/13/2007 18:40:13 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 765318.3 for Axial viewing
Y viewing position set to 15.5 mm having Peak intensity 765318.3 for Axial viewing

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	293532.1
-1.6	15.0	417556.5
-1.2	15.0	529811.3
-0.8	15.0	650837.5
-0.4	15.0	705012.0
0.0	15.0	707703.6
0.4	15.0	682449.0
0.8	15.0	625134.4
1.2	15.0	517619.3
1.6	15.0	364622.4
2.0	15.0	274474.2
0.0	10.0	10554.2
0.0	10.5	26957.0
0.0	11.0	42349.4

0.0	11.5	67942.2
0.0	12.0	104486.9
0.0	12.5	226689.9
0.0	13.0	326313.0
0.0	13.5	418632.3
0.0	14.0	528396.5
0.0	14.5	774576.1
0.0	15.0	801894.0
0.0	15.5	706087.9
0.0	16.0	598171.6
0.0	16.5	386445.2
0.0	17.0	274874.4
0.0	17.5	203521.8
0.0	18.0	140139.2
0.0	18.5	86589.8
0.0	19.0	20005.3
0.0	19.5	8099.9
0.0	20.0	4760.8
-0.8	15.0	651506.6
-0.4	15.0	706677.0
0.0	15.0	711301.0
0.4	15.0	672293.4
0.8	15.0	593429.9
0.0	13.0	334592.3
0.0	13.5	446893.8
0.0	14.0	559667.7
0.0	14.5	715242.3
0.0	15.0	712820.0
0.0	15.5	667149.5
0.0	16.0	574737.2
0.0	16.5	375408.5
0.0	17.0	274975.0

8/13/2007 18:44:41 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 715242.3 for Axial viewing
Y viewing position set to 14.5 mm having Peak intensity 715242.3 for Axial viewing

Align View X Radial for analyte Mn 257.610

X-position	Y-position	Intensity
-7.0	15.0	1539.0
-6.5	15.0	2213.8
-6.0	15.0	2410.0
-5.5	15.0	2340.5
-5.0	15.0	2582.2
-4.5	15.0	3238.3
-4.0	15.0	4382.8
-3.5	15.0	6740.8
-3.0	15.0	10708.7
-2.5	15.0	17121.8
-2.0	15.0	25927.1
-1.5	15.0	40334.1
-1.0	15.0	52578.2
-0.5	15.0	57293.1
0.0	15.0	59108.2
0.5	15.0	51597.8
1.0	15.0	43508.2
1.5	15.0	35699.5
2.0	15.0	27052.6
2.5	15.0	17211.3
3.0	15.0	7497.2
3.5	15.0	6693.7
4.0	15.0	6535.8
4.5	15.0	7315.8
5.0	15.0	8057.8
5.5	15.0	8587.8
6.0	15.0	8530.0
6.5	15.0	8238.8
7.0	15.0	8443.3

8/13/2007 18:51:29 aligned for analyte Mn 257.610

X viewing position set to 0.0 mm having Peak intensity 59108.2 for Radial viewing

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	3197782.7
-1.6	15.0	4317417.3
-1.2	15.0	5586326.8
-0.8	15.0	6879567.3
-0.4	15.0	7624401.8
0.0	15.0	7918817.4
0.4	15.0	7493374.5
0.8	15.0	6419580.0
1.2	15.0	5138303.2
1.6	15.0	3876028.4
2.0	15.0	2816586.5
0.0	10.0	66505.8
0.0	10.5	181297.8
0.0	11.0	301322.5
0.0	11.5	471895.6
0.0	12.0	730635.0
0.0	12.5	1724967.8
0.0	13.0	2496290.9
0.0	13.5	3505596.3
0.0	14.0	4668120.5
0.0	14.5	7089557.8
0.0	15.0	7823237.9
0.0	15.5	7946207.4
0.0	16.0	7353615.8
0.0	16.5	5387275.0
0.0	17.0	4147348.1
0.0	17.5	3072424.6
0.0	18.0	2266946.0
0.0	18.5	1570025.6
0.0	19.0	447044.5
0.0	19.5	206279.5
0.0	20.0	89779.0
-0.8	15.5	7005183.8
-0.4	15.5	7822659.9
0.0	15.5	7976004.6
0.4	15.5	7440038.1
0.8	15.5	6423200.3
0.0	13.5	3584564.4
0.0	14.0	4624549.7
0.0	14.5	7052902.8
0.0	15.0	7851864.8
0.0	15.5	8029735.5
0.0	16.0	7415696.2
0.0	16.5	5395373.1
0.0	17.0	4136708.2
0.0	17.5	3082816.3

8/13/2007 18:56:18 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 8029735.5 for Axial viewing
Y viewing position set to 15.5 mm having Peak intensity 8029735.5 for Axial viewing

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	3193376.7
-1.6	15.0	4428470.5
-1.2	15.0	5788529.9
-0.8	15.0	6953547.5
-0.4	15.0	7813627.4
0.0	15.0	8046489.0
0.4	15.0	7520803.7
0.8	15.0	6548788.2
1.2	15.0	5215173.2
1.6	15.0	3954236.4
2.0	15.0	2815685.7
0.0	10.0	116003.2

0.0	10.5	301304.7
0.0	11.0	479423.0
0.0	11.5	734465.9
0.0	12.0	1141443.6
0.0	12.5	2418607.2
0.0	13.0	3470996.7
0.0	13.5	4658538.2
0.0	14.0	5947844.0
0.0	14.5	7925697.2
0.0	15.0	8061167.4
0.0	15.5	7441636.8
0.0	16.0	6515235.5
0.0	16.5	4262231.9
0.0	17.0	3097559.4
0.0	17.5	2259432.1
0.0	18.0	1543982.2
0.0	18.5	948160.4
0.0	19.0	206470.5
0.0	19.5	89587.9
0.0	20.0	50978.6
-0.8	15.0	6994896.6
-0.4	15.0	7785201.3
0.0	15.0	7967603.9
0.4	15.0	7316751.6
0.8	15.0	6480574.0
0.0	13.0	3605385.9
0.0	13.5	4639525.4
0.0	14.0	5989381.2
0.0	14.5	7825247.4
0.0	15.0	8027273.0
0.0	15.5	7505222.5
0.0	16.0	6619169.0
0.0	16.5	4220384.9
0.0	17.0	3097707.7

8/13/2007 18:59:41 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 8027273.0 for Axial viewing
Y viewing position set to 15.0 mm having Peak intensity 8027273.0 for Axial viewing

Analysis Begun

Start Time: 8/13/2007 19:04:27
Logged In Analyst: Owner
Spectrometer Model: Optima 4300 DV, S/N 069N-na
Plasma On Time: 8/13/2007 17:30:51
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\Owner\Sample Information\070810A.sif
Batch ID: 070810a
Results Data Set: 070813A
Results Library: C:\pe\Owner\Results\Results.mdb

Method Loaded
Method Name: 200.7&6010_070703
IEC File: 070703.iec
Method Description: 200.7/6010_070703
Method Last Saved: 7/16/2007 14:45:32
MSF File:

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

Sequence No.: 1
Sample ID: Calib Blank 1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 0
Date Collected: 8/13/2007 19:04:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	222.0 kPa	0.65 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Calib Units
Sca	257893.2	12337.30	4.78%	100	%
Yr	260710.7	5575.44	2.14%	100	%
Ag†	1744.5	38.49	2.21%	[0.00]	mg/L
Al†	40.8	48.60	119.20%	[0.00]	mg/L
As†	7.8	1.13	14.57%	[0.00]	mg/L
B_†	278.6	9.67	3.47%	[0.00]	mg/L

Bat	-16.1	14.44	89.76%	[0.00]	mg/L
Bet	-4031.5	125.52	3.11%	[0.00]	mg/L
Cat	984.5	13.28	1.35%	[0.00]	mg/L
Cdt	77.1	0.24	0.31%	[0.00]	mg/L
Cot	-16.7	3.39	20.30%	[0.00]	mg/L
Crt	309.9	18.43	5.95%	[0.00]	mg/L
Cut	4495.3	175.79	3.91%	[0.00]	mg/L
Fet	-14.0	0.31	2.24%	[0.00]	mg/L
Kt	394.4	44.26	11.22%	[0.00]	mg/L
Mgt	-85.7	7.57	8.84%	[0.00]	mg/L
Mnt	516.7	33.44	6.47%	[0.00]	mg/L
Mot	37.2	3.57	9.58%	[0.00]	mg/L
Nat	-646.0	37.88	5.86%	[0.00]	mg/L
Nit	35.0	2.80	7.99%	[0.00]	mg/L
Pbt	-69.0	3.84	5.57%	[0.00]	mg/L
Sbt	-7.1	2.04	28.90%	[0.00]	mg/L
Set	-0.5	5.77	>999.9%	[0.00]	mg/L
Tlt	-17.5	1.58	8.98%	[0.00]	mg/L
Vt	181.5	27.81	15.32%	[0.00]	mg/L
Znt	305.0	10.59	3.47%	[0.00]	mg/L
Alxt	250.5	89.69	35.81%	[0.00]	ug/L
Bext	-4031.5	125.52	3.11%	[0.00]	ug/L

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

Autosampler Location: 15
Date Collected: 8/13/2007 19:08:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Standard 2

Analyte	Back Pressure	Flow
All	222.0 kPa	0.65 L/min

Mean Data: Standard 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Sca	231067.5	99.99	0.04%	89.6	%
Yr	243482.8	3761.52	1.54%	93.4	%
Agt	409447.5	6284.42	1.53%	[2]	mg/L
Alt	49105.5	196.34	0.40%	[10]	mg/L
Ast	16923.6	44.14	0.26%	[10]	mg/L
B_t	132246.2	524.62	0.40%	[5.02]	mg/L
Bat	817449.6	1875.07	0.23%	[10]	mg/L
Bet	13149539.2	95187.34	0.72%	[4.01]	mg/L
Cat	984805.2	29780.44	3.02%	[100]	mg/L
Cdt	117119.9	202.10	0.17%	[5.01]	mg/L
Cot	226700.2	8.37	0.00%	[10]	mg/L
Crt	699939.4	1445.81	0.21%	[9.97]	mg/L
Cut	4273001.8	8126.61	0.19%	[10]	mg/L
Fet	18232.5	58.14	0.32%	[9.98]	mg/L
Kt	132506.9	1064.88	0.80%	[100]	mg/L
Mgt	406259.8	11731.95	2.89%	[100]	mg/L
Mnt	5440923.1	6864.14	0.13%	[10]	mg/L
Mot	148872.2	299.46	0.20%	[9.98]	mg/L
Nat	336530.3	10049.57	2.99%	[100]	mg/L
Nit	217835.0	151.39	0.07%	[10]	mg/L
Pbt	53504.6	72.43	0.14%	[10]	mg/L
Sbt	15895.2	18.67	0.12%	[10]	mg/L
Set	15046.7	68.70	0.46%	[10]	mg/L
Tlt	29791.4	0.56	0.00%	[10]	mg/L
Vt	1624476.5	4771.19	0.29%	[10]	mg/L
Znt	507510.8	157.30	0.03%	[10]	mg/L
Alxt	1013089.6	2787.77	0.28%	[10000]	ug/L
Bext	13149539.2	95187.34	0.72%	[4010]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag	1	Lin, Calc Int	0.0	204700	0.00000	1.000000	
Al	1	Lin, Calc Int	0.0	4911	0.00000	1.000000	
As	1	Lin, Calc Int	0.0	1692	0.00000	1.000000	
B_	1	Lin, Calc Int	0.0	26340	0.00000	1.000000	
Ba	1	Lin, Calc Int	0.0	81740	0.00000	1.000000	
Be	1	Lin, Calc Int	0.0	3279000	0.00000	1.000000	
Ca	1	Lin, Calc Int	0.0	9848	0.00000	1.000000	
Cd	1	Lin, Calc Int	0.0	23380	0.00000	1.000000	
Co	1	Lin, Calc Int	-0.0	22670	0.00000	1.000000	
Cr	1	Lin, Calc Int	0.0	70200	0.00000	1.000000	
Cu	1	Lin, Calc Int	0.0	427300	0.00000	1.000000	
Fe	1	Lin, Calc Int	0.0	1827	0.00000	1.000000	
K	1	Lin, Calc Int	0.0	1325	0.00000	1.000000	
Mg	1	Lin, Calc Int	-0.0	4063	0.00000	1.000000	
Mn	1	Lin, Calc Int	0.0	544100	0.00000	1.000000	
Mo	1	Lin, Calc Int	0.0	14920	0.00000	1.000000	
Na	1	Lin, Calc Int	0.0	3365	0.00000	1.000000	
Ni	1	Lin, Calc Int	0.0	21780	0.00000	1.000000	
Pb	1	Lin, Calc Int	0.0	5350	0.00000	1.000000	
Sb	1	Lin, Calc Int	0.0	1590	0.00000	1.000000	
Se	1	Lin, Calc Int	0.0	1505	0.00000	1.000000	

Tl	1	Lin, Calc Int	0.0	2979	0.00000	1.000000
V	1	Lin, Calc Int	0.0	162400	0.00000	1.000000
Zn	1	Lin, Calc Int	0.0	50750	0.00000	1.000000
Alx	1	Lin, Calc Int	0.0	101.3	0.00000	1.000000
Bex	1	Lin, Calc Int	0.0	3279	0.00000	1.000000

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

Autosampler Location: 15
Date Collected: 8/13/2007 19:11:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICV

Analyte	Back Pressure	Flow
All	222.0 kPa	0.65 L/min

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	228374.9	88.6	%	0.28				0.32%
Yr	241092.5	92.5	%	0.07				0.08%
Agt	407698.1	1.99	mg/L	0.001	1.99	mg/L	0.001	0.06%
QC value within limits for Ag	Recovery = 99.57%							
Alt	49285.9	10.0	mg/L	0.01	10.0	mg/L	0.01	0.05%
QC value within limits for Al	Recovery = 100.37%							
Ast	17365.2	10.3	mg/L	0.13	10.3	mg/L	0.13	1.23%
QC value within limits for As	Recovery = 102.60%							
B_t	132572.1	5.01	mg/L	0.015	5.01	mg/L	0.015	0.30%
QC value within limits for B_	Recovery = 100.24%							
Bat	820711.8	10.0	mg/L	0.01	10.0	mg/L	0.01	0.11%
QC value within limits for Ba	Recovery = 100.40%							
Bet	13240658.7	4.04	mg/L	0.022	4.04	mg/L	0.022	0.54%
QC value within limits for Be	Recovery = 100.94%							
Cat	1009464.8	103	mg/L	1.4	103	mg/L	1.4	1.34%
QC value within limits for Ca	Recovery = 102.50%							
Cdt	117297.7	4.88	mg/L	0.004	4.88	mg/L	0.004	0.08%
QC value within limits for Cd	Recovery = 97.56%							
Cot	227186.4	10.0	mg/L	0.02	10.0	mg/L	0.02	0.16%
QC value within limits for Co	Recovery = 100.21%							
Crt	699490.9	9.96	mg/L	0.000	9.96	mg/L	0.000	0.00%
QC value within limits for Cr	Recovery = 99.64%							
Cut	4297256.6	10.1	mg/L	0.01	10.1	mg/L	0.01	0.12%
QC value within limits for Cu	Recovery = 100.66%							
Fet	18349.9	10.0	mg/L	0.02	10.0	mg/L	0.02	0.16%
QC value within limits for Fe	Recovery = 100.44%							
Kt	133349.9	101	mg/L	0.1	101	mg/L	0.1	0.11%
QC value within limits for K	Recovery = 100.64%							
Mgt	415285.6	102	mg/L	1.5	102	mg/L	1.5	1.46%
QC value within limits for Mg	Recovery = 102.22%							
Mnt	5456247.2	10.0	mg/L	0.01	10.0	mg/L	0.01	0.13%
QC value within limits for Mn	Recovery = 100.28%							
Mot	149132.8	10.00	mg/L	0.003	10.00	mg/L	0.003	0.03%
QC value within limits for Mo	Recovery = 99.97%							
Nat	345105.0	103	mg/L	0.9	103	mg/L	0.9	0.88%
QC value within limits for Na	Recovery = 102.55%							
Nit	217503.1	9.98	mg/L	0.009	9.98	mg/L	0.009	0.10%
QC value within limits for Ni	Recovery = 99.85%							
Pbt	54921.7	10.3	mg/L	0.14	10.3	mg/L	0.14	1.37%
QC value within limits for Pb	Recovery = 102.65%							
Sbt	16286.6	10.1	mg/L	0.18	10.1	mg/L	0.18	1.81%
QC value within limits for Sb	Recovery = 100.88%							
Set	15467.7	10.3	mg/L	0.23	10.3	mg/L	0.23	2.25%
QC value within limits for Se	Recovery = 102.99%							
Tlt	30641.3	10.3	mg/L	0.17	10.3	mg/L	0.17	1.68%
QC value within limits for Tl	Recovery = 103.14%							
Vt	1626031.4	10.1	mg/L	0.00	10.1	mg/L	0.00	0.03%
QC value within limits for V	Recovery = 100.65%							
Znt	507148.6	9.92	mg/L	0.001	9.92	mg/L	0.001	0.01%
QC value within limits for Zn	Recovery = 99.25%							
Alxt	1019710.5	10100	ug/L	5.0	10.1	mg/L	0.00	0.05%
QC value within limits for Alx	Recovery = 100.65%							
Bext	13240658.7	4040	ug/L	22.0	4.04	mg/L	0.022	0.54%
QC value within limits for Bex	Recovery = 100.94%							

All analyte(s) passed QC.

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

Autosampler Location: 9
Date Collected: 8/13/2007 19:14:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LINEARITY

Analyte	Back Pressure	Flow
All	222.0 kPa	0.65 L/min

Mean Data: LINEARITY

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	227167.5	88.1	%	0.97				1.10%
Yr	230492.4	88.4	%	1.03				1.16%
Agt	-3410.4	-0.0167	mg/L	0.00096	-0.0167	mg/L	0.00096	5.74%
QC value within limits for Ag	Recovery = Not calculated							
Alt	-16.5	-0.00336	mg/L	0.011174	-0.00336	mg/L	0.011174	332.80%
QC value within limits for Al	Recovery = Not calculated							
Ast	-73.6	0.0175	mg/L	0.00174	0.0175	mg/L	0.00174	9.93%
QC value within limits for As	Recovery = Not calculated							
B_t	583.3	0.0221	mg/L	0.00313	0.0221	mg/L	0.00313	14.13%
QC value within limits for B_	Recovery = Not calculated							
Bat	91.1	0.00111	mg/L	0.000073	0.00111	mg/L	0.000073	6.54%
QC value within limits for Ba	Recovery = Not calculated							
Bet	-612.3	-0.00019	mg/L	0.000010	-0.00019	mg/L	0.000010	5.24%
QC value within limits for Be	Recovery = Not calculated							
Cat	3036801.5	308	mg/L	2.6	308	mg/L	2.6	0.83%
QC value within limits for Ca	Recovery = 102.79%							
Cdt	-30.7	-0.00054	mg/L	0.000191	-0.00054	mg/L	0.000191	35.11%
QC value within limits for Cd	Recovery = Not calculated							
Cot	64.3	0.00283	mg/L	0.000149	0.00283	mg/L	0.000149	5.26%
QC value within limits for Co	Recovery = Not calculated							
Crt	115.5	0.00165	mg/L	0.000024	0.00165	mg/L	0.000024	1.45%
QC value within limits for Cr	Recovery = Not calculated							
Cut	-6613.5	-0.0155	mg/L	0.00061	-0.0155	mg/L	0.00061	3.91%
QC value within limits for Cu	Recovery = Not calculated							
Fet	184559.1	101	mg/L	0.2	101	mg/L	0.2	0.20%
QC value within limits for Fe	Recovery = 101.02%							
Kt	419175.5	316	mg/L	3.1	316	mg/L	3.1	0.98%
QC value within limits for K	Recovery = 105.45%							
Mgt	813310.4	200	mg/L	1.9	200	mg/L	1.9	0.96%
QC value within limits for Mg	Recovery = Not calculated							
Mnt	2099.8	0.00386	mg/L	0.000039	0.00386	mg/L	0.000039	1.01%
QC value within limits for Mn	Recovery = Not calculated							
Mot	27.2	0.00182	mg/L	0.000531	0.00182	mg/L	0.000531	29.15%
QC value within limits for Mo	Recovery = Not calculated							
Nat	1072522.5	319	mg/L	3.8	319	mg/L	3.8	1.20%
QC value within limits for Na	Recovery = 106.23%							
Nit	22.3	0.00102	mg/L	0.000371	0.00102	mg/L	0.000371	36.24%
QC value within limits for Ni	Recovery = Not calculated							
Pbt	-36.6	-0.00684	mg/L	0.002190	-0.00684	mg/L	0.002190	32.04%
QC value within limits for Pb	Recovery = Not calculated							
Sbt	20.8	0.0130	mg/L	0.00088	0.0130	mg/L	0.00088	6.76%
QC value within limits for Sb	Recovery = Not calculated							
Set	-497.9	-0.134	mg/L	0.0045	-0.134	mg/L	0.0045	3.35%
QC value within limits for Se	Recovery = Not calculated							
Tlt	84.6	0.0284	mg/L	0.00096	0.0284	mg/L	0.00096	3.40%
QC value within limits for Tl	Recovery = Not calculated							
Vt	-2517.4	-0.0155	mg/L	0.00022	-0.0155	mg/L	0.00022	1.42%
QC value within limits for V	Recovery = Not calculated							
Znt	1470.7	0.0290	mg/L	0.00007	0.0290	mg/L	0.00007	0.25%
QC value within limits for Zn	Recovery = Not calculated							
Alxt	618.4	6.10	ug/L	0.386	0.00610	mg/L	0.000386	6.32%
QC value within limits for Alx	Recovery = Not calculated							
Bext	-612.3	-0.187	ug/L	0.0098	-0.00019	mg/L	0.000010	5.24%
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: 8/13/2007 19:18:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	221.0 kPa	0.65 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	236329.4	91.6	%	0.31				0.34%
Yr	236675.6	90.8	%	0.08				0.09%
Agt	-3410.9	-0.0167	mg/L	0.00011	-0.0167	mg/L	0.00011	0.67%
QC value within limits for Ag	Recovery = Not calculated							
Alt	1237178.3	252	mg/L	3.8	252	mg/L	3.8	1.51%
QC value within limits for Al	Recovery = 100.78%							
Ast	-328.9	-0.134	mg/L	0.0005	-0.134	mg/L	0.0005	0.36%
QC value within limits for As	Recovery = Not calculated							
B_t	1787.7	0.0679	mg/L	0.00061	0.0679	mg/L	0.00061	0.90%
QC value within limits for B_	Recovery = Not calculated							
Bat	115.7	0.00142	mg/L	0.000098	0.00142	mg/L	0.000098	6.95%
QC value within limits for Ba	Recovery = Not calculated							
Bet	-827.2	-0.00025	mg/L	0.000018	-0.00025	mg/L	0.000018	7.28%
QC value within limits for Be	Recovery = Not calculated							
Cat	2574452.5	261	mg/L	4.7	261	mg/L	4.7	1.82%
QC value within limits for Ca	Recovery = 104.57%							
Cdt	-47.3	0.00137	mg/L	0.000003	0.00137	mg/L	0.000003	0.22%
QC value within limits for Cd	Recovery = Not calculated							
Cot	38.2	0.00168	mg/L	0.000215	0.00168	mg/L	0.000215	12.74%
QC value within limits for Co	Recovery = Not calculated							
Crt	-74.5	-0.00106	mg/L	0.000174	-0.00106	mg/L	0.000174	16.34%
QC value within limits for Cr	Recovery = Not calculated							
Cut	-6980.4	-0.0163	mg/L	0.00020	-0.0163	mg/L	0.00020	1.24%
QC value within limits for Cu	Recovery = Not calculated							
Fet	183184.4	100	mg/L	0.4	100	mg/L	0.4	0.36%
QC value within limits for Fe	Recovery = 100.27%							
Kt	516.4	0.390	mg/L	0.0422	0.390	mg/L	0.0422	10.84%
QC value within limits for K	Recovery = Not calculated							
Mgt	1032069.2	254	mg/L	3.9	254	mg/L	3.9	1.54%
QC value within limits for Mg	Recovery = 101.62%							
Mnt	1695.4	0.00312	mg/L	0.000007	0.00312	mg/L	0.000007	0.23%
QC value within limits for Mn	Recovery = Not calculated							
Mot	40.4	0.00271	mg/L	0.000382	0.00271	mg/L	0.000382	14.10%
QC value within limits for Mo	Recovery = Not calculated							
Nat	624.6	0.186	mg/L	0.0102	0.186	mg/L	0.0102	5.48%
QC value within limits for Na	Recovery = Not calculated							
Nit	-3.1	-0.00014	mg/L	0.000068	-0.00014	mg/L	0.000068	48.28%
QC value within limits for Ni	Recovery = Not calculated							
Pbt	-248.7	-0.0465	mg/L	0.00144	-0.0465	mg/L	0.00144	3.09%
QC value within limits for Pb	Recovery = Not calculated							
Sbt	16.2	0.0101	mg/L	0.00368	0.0101	mg/L	0.00368	36.24%
QC value within limits for Sb	Recovery = Not calculated							
Set	-511.9	-0.145	mg/L	0.0008	-0.145	mg/L	0.0008	0.56%
QC value within limits for Se	Recovery = Not calculated							
Tlt	54.5	0.0182	mg/L	0.00220	0.0182	mg/L	0.00220	12.05%
QC value within limits for Tl	Recovery = Not calculated							
Vt	-2564.3	-0.0158	mg/L	0.00007	-0.0158	mg/L	0.00007	0.42%
QC value within limits for V	Recovery = Not calculated							
Znt	1228.6	0.0242	mg/L	0.00017	0.0242	mg/L	0.00017	0.72%
QC value within limits for Zn	Recovery = Not calculated							
Alxt	Saturated2							
Unable to evaluate QC.								
Bext	-827.2	-0.252	ug/L	0.0184	-0.00025	mg/L	0.000018	7.28%
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: 8/13/2007 19:22:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	221.0 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	235764.7	91.4	%	2.10				2.29%
Yr	237098.5	90.9	%	0.18				0.20%
Ag†	49978.7	0.244	mg/L	0.0012	0.244	mg/L	0.0012	0.49%
QC value less than the lower limit for Ag Recovery = 48.83%								
Al†	1187694.1	242	mg/L	1.6	242	mg/L	1.6	0.68%
QC value within limits for Al Recovery = 96.75%								
As†	-329.1	-0.136	mg/L	0.0003	-0.136	mg/L	0.0003	0.21%
QC value less than the lower limit for As Recovery = Not calculated								
B_†	1716.5	0.0647	mg/L	0.00018	0.0647	mg/L	0.00018	0.27%
QC value greater than the upper limit for B Recovery = Not calculated								
Ba†	20201.5	0.247	mg/L	0.0056	0.247	mg/L	0.0056	2.28%
QC value within limits for Ba Recovery = 98.85%								
Be†	794977.3	0.242	mg/L	0.0020	0.242	mg/L	0.0020	0.82%
QC value within limits for Be Recovery = 96.97%								
Ca†	2463750.4	250	mg/L	1.4	250	mg/L	1.4	0.56%
QC value within limits for Ca Recovery = 100.07%								
Cd†	10681.1	0.461	mg/L	0.0119	0.461	mg/L	0.0119	2.58%
QC value within limits for Cd Recovery = 92.24%								
Co†	5258.1	0.232	mg/L	0.0059	0.232	mg/L	0.0059	2.54%
QC value within limits for Co Recovery = 92.78%								
Cr†	16669.0	0.237	mg/L	0.0063	0.237	mg/L	0.0063	2.66%
QC value within limits for Cr Recovery = 94.97%								
Cu†	99324.4	0.233	mg/L	0.0021	0.233	mg/L	0.0021	0.91%
QC value within limits for Cu Recovery = 93.07%								
Fe†	177217.5	97.0	mg/L	0.27	97.0	mg/L	0.27	0.27%
QC value within limits for Fe Recovery = 97.00%								
K†	223.2	0.168	mg/L	0.0340	0.168	mg/L	0.0340	20.20%
QC value within limits for K Recovery = Not calculated								
Mg†	991205.4	244	mg/L	2.0	244	mg/L	2.0	0.84%
QC value within limits for Mg Recovery = 97.59%								
Mn†	135800.4	0.250	mg/L	0.0015	0.250	mg/L	0.0015	0.59%
QC value within limits for Mn Recovery = 99.84%								
Mo†	35.3	0.00237	mg/L	0.000744	0.00237	mg/L	0.000744	31.44%
QC value within limits for Mo Recovery = Not calculated								
Na†	223.6	0.0664	mg/L	0.01899	0.0664	mg/L	0.01899	28.59%
QC value within limits for Na Recovery = Not calculated								
Ni†	9789.0	0.449	mg/L	0.0116	0.449	mg/L	0.0116	2.59%
QC value within limits for Ni Recovery = 89.88%								
Pb†	2354.6	0.440	mg/L	0.0114	0.440	mg/L	0.0114	2.59%
QC value within limits for Pb Recovery = 88.01%								
Sb†	23.6	0.0110	mg/L	0.00329	0.0110	mg/L	0.00329	29.96%
QC value within limits for Sb Recovery = Not calculated								
Se†	-483.0	-0.132	mg/L	0.0054	-0.132	mg/L	0.0054	4.06%
QC value less than the lower limit for Se Recovery = Not calculated								
Tl†	48.5	0.0169	mg/L	0.00014	0.0169	mg/L	0.00014	0.86%
QC value within limits for Tl Recovery = Not calculated								
V†	36429.1	0.226	mg/L	0.0014	0.226	mg/L	0.0014	0.61%
QC value within limits for V Recovery = 90.22%								
Zn†	26890.9	0.527	mg/L	0.0127	0.527	mg/L	0.0127	2.42%
QC value within limits for Zn Recovery = 105.36%								
Alx†	Saturated2							
Unable to evaluate QC.								
Bex†	794977.3	242	ug/L	2.0	0.242	mg/L	0.0020	0.82%
QC value within limits for Bex Recovery = 96.97%								

QC Failed. Continue with analysis.

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

Autosampler Location: 0
Date Collected: 8/13/2007 19:26:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Wash

Analyte	Back Pressure	Flow
All	221.0 kPa	0.65 L/min

Mean Data: Wash

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	262878.5	102	%	1.3				1.30%
Yr	251579.1	96.5	%	0.05				0.05%
Agt	330.7	0.00162	mg/L	0.000251	0.00162	mg/L	0.000251	15.52%
QC value within limits for Ag	Recovery = Not calculated							
Alt	-55.8	-0.0114	mg/L	0.00507	-0.0114	mg/L	0.00507	44.58%
QC value within limits for Al	Recovery = Not calculated							
Ast	-0.0	-0.00001	mg/L	0.003058	-0.00001	mg/L	0.003058	>999.9%
QC value within limits for As	Recovery = Not calculated							
B_t	76.0	0.00288	mg/L	0.000073	0.00288	mg/L	0.000073	2.54%
QC value within limits for B_	Recovery = Not calculated							
Bat	-1.9	-0.00002	mg/L	0.000026	-0.00002	mg/L	0.000026	113.33%
QC value within limits for Ba	Recovery = Not calculated							
Bet	159.9	0.00005	mg/L	0.000008	0.00005	mg/L	0.000008	15.90%
QC value within limits for Be	Recovery = Not calculated							
Cat	34.9	0.00355	mg/L	0.000294	0.00355	mg/L	0.000294	8.29%
QC value within limits for Ca	Recovery = Not calculated							
Cdt	2.8	0.00012	mg/L	0.000062	0.00012	mg/L	0.000062	51.29%
QC value within limits for Cd	Recovery = Not calculated							
Cot	3.5	0.00015	mg/L	0.000258	0.00015	mg/L	0.000258	167.49%
QC value within limits for Co	Recovery = Not calculated							
Crt	-5.7	-0.00008	mg/L	0.000041	-0.00008	mg/L	0.000041	50.13%
QC value within limits for Cr	Recovery = Not calculated							
Cut	9.7	0.00002	mg/L	0.000000	0.00002	mg/L	0.000000	0.79%
QC value within limits for Cu	Recovery = Not calculated							
Fet	-3.9	-0.00215	mg/L	0.000862	-0.00215	mg/L	0.000862	40.18%
QC value within limits for Fe	Recovery = Not calculated							
Kt	0.9	0.00065	mg/L	0.029362	0.00065	mg/L	0.029362	>999.9%
QC value within limits for K	Recovery = Not calculated							
Mgt	3.5	0.00086	mg/L	0.000511	0.00086	mg/L	0.000511	59.10%
QC value within limits for Mg	Recovery = Not calculated							
Mnt	-219.4	-0.00040	mg/L	0.000001	-0.00040	mg/L	0.000001	0.35%
QC value within limits for Mn	Recovery = Not calculated							
Mot	-2.6	-0.00018	mg/L	0.000072	-0.00018	mg/L	0.000072	40.60%
QC value within limits for Mo	Recovery = Not calculated							
Nat	64.6	0.0192	mg/L	0.01090	0.0192	mg/L	0.01090	56.75%
QC value within limits for Na	Recovery = Not calculated							
Nit	-1.4	-0.00006	mg/L	0.000033	-0.00006	mg/L	0.000033	52.44%
QC value within limits for Ni	Recovery = Not calculated							
Pbt	5.3	0.00099	mg/L	0.000607	0.00099	mg/L	0.000607	61.12%
QC value within limits for Pb	Recovery = Not calculated							
Sbt	-9.3	-0.00584	mg/L	0.001869	-0.00584	mg/L	0.001869	32.01%
QC value within limits for Sb	Recovery = Not calculated							
Set	-0.4	-0.00025	mg/L	0.003919	-0.00025	mg/L	0.003919	>999.9%
QC value within limits for Se	Recovery = Not calculated							
Tlt	5.7	0.00193	mg/L	0.001258	0.00193	mg/L	0.001258	65.27%
QC value within limits for Tl	Recovery = Not calculated							
Vt	-22.9	-0.00014	mg/L	0.000120	-0.00014	mg/L	0.000120	84.96%
QC value within limits for V	Recovery = Not calculated							
Znt	13.6	0.00027	mg/L	0.000044	0.00027	mg/L	0.000044	16.26%
QC value within limits for Zn	Recovery = Not calculated							
Alxt	62.5	0.617	ug/L	0.1913	0.00062	mg/L	0.000191	31.03%
QC value within limits for Alx	Recovery = Not calculated							
Bext	159.9	0.0488	ug/L	0.00775	0.00005	mg/L	0.000008	15.90%
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: 8/13/2007 19:29:46
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	268220.7	104	%	2.0				1.93%
Yr	261327.0	100	%	1.1				1.10%
Ag†	172908.2	0.845	mg/L	0.0170	0.845	mg/L	0.0170	2.01%
QC value less than the lower limit for Ag Recovery = 84.46%								
Al†	4880.3	0.994	mg/L	0.0089	0.994	mg/L	0.0089	0.90%
QC value within limits for Al Recovery = 99.38%								
As†	1585.4	0.937	mg/L	0.0216	0.937	mg/L	0.0216	2.31%
QC value within limits for As Recovery = 93.68%								
B_†	23460.0	0.889	mg/L	0.0181	0.889	mg/L	0.0181	2.04%
QC value less than the lower limit for B_ Recovery = 88.85%								
Ba†	81857.9	1.00	mg/L	0.022	1.00	mg/L	0.022	2.24%
QC value within limits for Ba Recovery = 100.14%								
Be†	3054853.8	0.932	mg/L	0.0001	0.932	mg/L	0.0001	0.01%
QC value within limits for Be Recovery = 93.16%								
Ca†	10069.9	1.02	mg/L	0.014	1.02	mg/L	0.014	1.37%
QC value within limits for Ca Recovery = 102.25%								
Cd†	21431.1	0.904	mg/L	0.0141	0.904	mg/L	0.0141	1.56%
QC value within limits for Cd Recovery = 90.43%								
Co†	22642.7	0.999	mg/L	0.0207	0.999	mg/L	0.0207	2.08%
QC value within limits for Co Recovery = 99.88%								
Cr†	67063.3	0.955	mg/L	0.0218	0.955	mg/L	0.0218	2.28%
QC value within limits for Cr Recovery = 95.53%								
Cu†	400073.9	0.937	mg/L	0.0173	0.937	mg/L	0.0173	1.85%
QC value within limits for Cu Recovery = 93.72%								
Fe†	1832.9	1.00	mg/L	0.012	1.00	mg/L	0.012	1.20%
QC value within limits for Fe Recovery = 100.33%								
K†	12503.3	9.44	mg/L	0.035	9.44	mg/L	0.035	0.37%
QC value within limits for K Recovery = 94.36%								
Mg†	4332.7	1.07	mg/L	0.011	1.07	mg/L	0.011	1.02%
QC value within limits for Mg Recovery = 106.65%								
Mn†	539886.6	0.992	mg/L	0.0001	0.992	mg/L	0.0001	0.01%
QC value within limits for Mn Recovery = 99.23%								
Mo†	13624.7	0.913	mg/L	0.0178	0.913	mg/L	0.0178	1.94%
QC value within limits for Mo Recovery = 91.34%								
Na†	3550.7	1.06	mg/L	0.010	1.06	mg/L	0.010	0.98%
QC value within limits for Na Recovery = 105.51%								
Ni†	21844.8	1.00	mg/L	0.020	1.00	mg/L	0.020	2.04%
QC value within limits for Ni Recovery = 100.28%								
Pb†	5435.4	1.02	mg/L	0.023	1.02	mg/L	0.023	2.22%
QC value within limits for Pb Recovery = 101.59%								
Sb†	1496.6	0.926	mg/L	0.0192	0.926	mg/L	0.0192	2.07%
QC value within limits for Sb Recovery = 92.62%								
Se†	1363.4	0.908	mg/L	0.0216	0.908	mg/L	0.0216	2.37%
QC value within limits for Se Recovery = 90.80%								
Tl†	3034.3	1.02	mg/L	0.019	1.02	mg/L	0.019	1.87%
QC value within limits for Tl Recovery = 102.11%								
V†	149337.9	0.925	mg/L	0.0213	0.925	mg/L	0.0213	2.30%
QC value within limits for V Recovery = 92.46%								
Zn†	49349.7	0.966	mg/L	0.0180	0.966	mg/L	0.0180	1.86%
QC value within limits for Zn Recovery = 96.56%								
Alx†	94390.7	932	ug/L	9.1	0.932	mg/L	0.0091	0.98%
QC value within limits for Alx Recovery = 93.17%								
Bex†	3054853.8	932	ug/L	0.1	0.932	mg/L	0.0001	0.01%
QC value within limits for Bex Recovery = 93.16%								

QC Failed. Retry.

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

Autosampler Location: 12
Date Collected: 8/13/2007 19:32:37
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	263786.8	102	%	0.3				0.31%
Yr	258515.4	99.2	%	0.99				1.00%
Agt	172841.0	0.844	mg/L	0.0014	0.844	mg/L	0.0014	0.17%
QC value less than the lower limit for Ag Recovery = 84.43%								
Alt	4946.9	1.01	mg/L	0.014	1.01	mg/L	0.014	1.40%
QC value within limits for Al Recovery = 100.74%								
Ast	1606.9	0.949	mg/L	0.0025	0.949	mg/L	0.0025	0.27%
QC value within limits for As Recovery = 94.95%								
B_t	23569.8	0.893	mg/L	0.0019	0.893	mg/L	0.0019	0.21%
QC value less than the lower limit for B_ Recovery = 89.27%								
Bat	82053.7	1.00	mg/L	0.007	1.00	mg/L	0.007	0.69%
QC value within limits for Ba Recovery = 100.38%								
Bet	3084809.1	0.941	mg/L	0.0101	0.941	mg/L	0.0101	1.07%
QC value within limits for Be Recovery = 94.07%								
Cat	10202.0	1.04	mg/L	0.015	1.04	mg/L	0.015	1.44%
QC value within limits for Ca Recovery = 103.59%								
Cdt	21331.7	0.900	mg/L	0.0010	0.900	mg/L	0.0010	0.11%
QC value less than the lower limit for Cd Recovery = 89.98%								
Cot	22598.1	0.997	mg/L	0.0007	0.997	mg/L	0.0007	0.07%
QC value within limits for Co Recovery = 99.68%								
Crt	67209.7	0.957	mg/L	0.0052	0.957	mg/L	0.0052	0.54%
QC value within limits for Cr Recovery = 95.73%								
Cut	397370.5	0.931	mg/L	0.0061	0.931	mg/L	0.0061	0.66%
QC value within limits for Cu Recovery = 93.09%								
Fet	1851.9	1.01	mg/L	0.014	1.01	mg/L	0.014	1.36%
QC value within limits for Fe Recovery = 101.37%								
Kt	12656.8	9.55	mg/L	0.036	9.55	mg/L	0.036	0.37%
QC value within limits for K Recovery = 95.52%								
Mgt	4378.4	1.08	mg/L	0.013	1.08	mg/L	0.013	1.19%
QC value within limits for Mg Recovery = 107.77%								
Mnt	543579.0	0.999	mg/L	0.0126	0.999	mg/L	0.0126	1.26%
QC value within limits for Mn Recovery = 99.91%								
Mot	13648.6	0.915	mg/L	0.0045	0.915	mg/L	0.0045	0.49%
QC value within limits for Mo Recovery = 91.50%								
Nat	3539.4	1.05	mg/L	0.001	1.05	mg/L	0.001	0.09%
QC value within limits for Na Recovery = 105.17%								
Nit	21897.1	1.01	mg/L	0.008	1.01	mg/L	0.008	0.76%
QC value within limits for Ni Recovery = 100.52%								
Pbt	5521.6	1.03	mg/L	0.002	1.03	mg/L	0.002	0.23%
QC value within limits for Pb Recovery = 103.20%								
Sbt	1508.0	0.933	mg/L	0.0008	0.933	mg/L	0.0008	0.09%
QC value within limits for Sb Recovery = 93.33%								
Set	1374.0	0.915	mg/L	0.0040	0.915	mg/L	0.0040	0.43%
QC value within limits for Se Recovery = 91.51%								
Tlt	3074.9	1.03	mg/L	0.004	1.03	mg/L	0.004	0.40%
QC value within limits for Tl Recovery = 103.47%								
Vt	149546.4	0.926	mg/L	0.0073	0.926	mg/L	0.0073	0.79%
QC value within limits for V Recovery = 92.59%								
Znt	49530.6	0.969	mg/L	0.0056	0.969	mg/L	0.0056	0.58%
QC value within limits for Zn Recovery = 96.91%								
Alxt	93592.3	924	ug/L	8.9	0.924	mg/L	0.0089	0.96%
QC value within limits for Alx Recovery = 92.38%								
Sext	3084809.1	941	ug/L	10.1	0.941	mg/L	0.0101	1.07%

QC value within limits for Bex Recovery = 94.07%
QC Failed. Continue with analysis.

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

Autosampler Location: 4
Date Collected: 8/13/2007 19:37:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	220.0 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	247239.1	95.9	%	0.77				0.80%
Yr	247567.2	95.0	%	0.70				0.73%
Ag†	145530.1	0.711	mg/L	0.1118	0.711	mg/L	0.1118	15.73%
QC value within limits for Ag		Recovery = 71.09%						
Al†	25003.1	5.09	mg/L	0.068	5.09	mg/L	0.068	1.33%
QC value within limits for Al		Recovery = 101.83%						
As†	8342.1	4.93	mg/L	0.006	4.93	mg/L	0.006	0.11%
QC value within limits for As		Recovery = 98.58%						
B_†	63742.3	2.41	mg/L	0.005	2.41	mg/L	0.005	0.21%
QC value within limits for B_		Recovery = 96.38%						
Ba†	406329.2	4.97	mg/L	0.001	4.97	mg/L	0.001	0.03%
QC value within limits for Ba		Recovery = 99.41%						
Be†	6525437.7	1.99	mg/L	0.030	1.99	mg/L	0.030	1.53%
QC value within limits for Be		Recovery = 99.50%						
Ca†	512692.2	52.1	mg/L	0.08	52.1	mg/L	0.08	0.15%
QC value within limits for Ca		Recovery = 104.12%						
Cd†	59095.1	2.46	mg/L	0.003	2.46	mg/L	0.003	0.11%
QC value within limits for Cd		Recovery = 98.46%						
Co†	113684.8	5.01	mg/L	0.002	5.01	mg/L	0.002	0.04%
QC value within limits for Co		Recovery = 100.30%						
Cr†	345042.4	4.91	mg/L	0.017	4.91	mg/L	0.017	0.35%
QC value within limits for Cr		Recovery = 98.30%						
Cu†	2035223.5	4.77	mg/L	0.013	4.77	mg/L	0.013	0.27%
QC value within limits for Cu		Recovery = 95.35%						
Fe†	9424.1	5.16	mg/L	0.107	5.16	mg/L	0.107	2.07%
QC value within limits for Fe		Recovery = 103.17%						
K†	65880.4	49.7	mg/L	0.62	49.7	mg/L	0.62	1.24%
QC value within limits for K		Recovery = 99.44%						
Mg†	212996.4	52.4	mg/L	0.02	52.4	mg/L	0.02	0.04%
QC value within limits for Mg		Recovery = 104.86%						
Mn†	2728672.7	5.02	mg/L	0.004	5.02	mg/L	0.004	0.09%
QC value within limits for Mn		Recovery = 100.30%						
Mo†	72772.6	4.88	mg/L	0.015	4.88	mg/L	0.015	0.31%
QC value within limits for Mo		Recovery = 97.57%						
Na†	173915.9	51.7	mg/L	0.10	51.7	mg/L	0.10	0.19%
QC value within limits for Na		Recovery = 103.36%						
Ni†	110142.9	5.06	mg/L	0.021	5.06	mg/L	0.021	0.42%
QC value within limits for Ni		Recovery = 101.13%						
Pb†	27391.7	5.12	mg/L	0.004	5.12	mg/L	0.004	0.07%
QC value within limits for Pb		Recovery = 102.39%						
Sb†	7950.1	4.92	mg/L	0.010	4.92	mg/L	0.010	0.20%
QC value within limits for Sb		Recovery = 98.47%						
Se†	7602.8	5.06	mg/L	0.025	5.06	mg/L	0.025	0.49%
QC value within limits for Se		Recovery = 101.26%						
Tl†	15539.0	5.23	mg/L	0.001	5.23	mg/L	0.001	0.02%
QC value within limits for Tl		Recovery = 104.59%						
V†	795964.4	4.93	mg/L	0.011	4.93	mg/L	0.011	0.22%
QC value within limits for V		Recovery = 98.54%						
Zn†	263142.8	5.15	mg/L	0.018	5.15	mg/L	0.018	0.35%
QC value within limits for Zn		Recovery = 103.01%						
Alx†	491360.1	4850	ug/L	29.9	4.85	mg/L	0.030	0.62%
QC value within limits for Alx		Recovery = 97.00%						
Bex†	6525437.7	1990	ug/L	30.4	1.99	mg/L	0.030	1.53%
QC value within limits for Bex		Recovery = 99.50%						

All analyte(s) passed QC.

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

Autosampler Location: 0
Date Collected: 8/13/2007 19:40:20
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	261637.5	101	%	0.3				0.32%
Yr	255025.6	97.8	%	0.31				0.31%
Agf	3844.9	0.0188	mg/L	0.00031	0.0188	mg/L	0.00031	1.64%
QC value greater than the upper limit for Ag Recovery = Not calculated								
Alf	-1.3	-0.00026	mg/L	0.007468	-0.00026	mg/L	0.007468	>999.9%
QC value within limits for Al Recovery = Not calculated								
Asf	13.5	0.00799	mg/L	0.002443	0.00799	mg/L	0.002443	30.59%
QC value within limits for As Recovery = Not calculated								
B_f	427.6	0.0162	mg/L	0.00149	0.0162	mg/L	0.00149	9.20%
QC value within limits for B_ Recovery = Not calculated								
Baf	-10.2	-0.00013	mg/L	0.000104	-0.00013	mg/L	0.000104	83.42%
QC value within limits for Ba Recovery = Not calculated								
Bef	110.0	0.00003	mg/L	0.000039	0.00003	mg/L	0.000039	115.33%
QC value within limits for Be Recovery = Not calculated								
Caf	12.7	0.00129	mg/L	0.000868	0.00129	mg/L	0.000868	67.27%
QC value within limits for Ca Recovery = Not calculated								
Cdf	15.8	0.00054	mg/L	0.000031	0.00054	mg/L	0.000031	5.81%
QC value within limits for Cd Recovery = Not calculated								
Cof	-2.1	-0.00009	mg/L	0.000368	-0.00009	mg/L	0.000368	400.35%
QC value within limits for Co Recovery = Not calculated								
Crf	0.7	0.00001	mg/L	0.000024	0.00001	mg/L	0.000024	242.33%
QC value within limits for Cr Recovery = Not calculated								
Cuf	172.8	0.00040	mg/L	0.000218	0.00040	mg/L	0.000218	53.86%
QC value within limits for Cu Recovery = Not calculated								
Fef	-0.6	-0.00035	mg/L	0.000325	-0.00035	mg/L	0.000325	93.85%
QC value within limits for Fe Recovery = Not calculated								
Kf	-16.1	-0.0122	mg/L	0.01473	-0.0122	mg/L	0.01473	121.20%
QC value within limits for K Recovery = Not calculated								
Mgf	6.3	0.00156	mg/L	0.000058	0.00156	mg/L	0.000058	3.74%
QC value within limits for Mg Recovery = Not calculated								
Mnf	-206.7	-0.00038	mg/L	0.000007	-0.00038	mg/L	0.000007	1.81%
QC value within limits for Mn Recovery = Not calculated								
Mof	14.0	0.00094	mg/L	0.000277	0.00094	mg/L	0.000277	29.64%
QC value within limits for Mo Recovery = Not calculated								
Naf	135.6	0.0403	mg/L	0.02568	0.0403	mg/L	0.02568	63.72%
QC value within limits for Na Recovery = Not calculated								
Nif	-6.0	-0.00027	mg/L	0.000123	-0.00027	mg/L	0.000123	45.01%
QC value within limits for Ni Recovery = Not calculated								
Pbf	11.2	0.00209	mg/L	0.000530	0.00209	mg/L	0.000530	25.33%
QC value within limits for Pb Recovery = Not calculated								
Sbf	0.9	0.00056	mg/L	0.002258	0.00056	mg/L	0.002258	405.01%
QC value within limits for Sb Recovery = Not calculated								
Sef	-1.1	-0.00076	mg/L	0.001811	-0.00076	mg/L	0.001811	239.29%
QC value within limits for Se Recovery = Not calculated								
Tlf	5.2	0.00176	mg/L	0.000094	0.00176	mg/L	0.000094	5.34%
QC value within limits for Tl Recovery = Not calculated								
Vf	-18.1	-0.00011	mg/L	0.000110	-0.00011	mg/L	0.000110	99.09%
QC value within limits for V Recovery = Not calculated								
Znf	43.0	0.00085	mg/L	0.000092	0.00085	mg/L	0.000092	10.80%
QC value within limits for Zn Recovery = Not calculated								
Alxf	109.8	1.08	ug/L	0.991	0.00108	mg/L	0.000991	91.42%
QC value within limits for Alx Recovery = Not calculated								
Bexf	110.0	0.0336	ug/L	0.03870	0.00003	mg/L	0.000039	115.33%
QC value within limits for Bex Recovery = Not calculated								

QC Failed. Retry.

Sequence No.: 12 **Autosampler Location: 0**
Sample ID: ICB **Date Collected: 8/13/2007 19:42:55**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	221.0 kPa	0.65 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	264330.7	102	%	1.4				1.37%
Yr	254016.5	97.4	%	0.03				0.03%
Agt	3111.8	0.0152	mg/L	0.00032	0.0152	mg/L	0.00032	2.09%
QC value greater than the upper limit for Ag Recovery = Not calculated								
Alt	22.9	0.00467	mg/L	0.003426	0.00467	mg/L	0.003426	73.37%
QC value within limits for Al Recovery = Not calculated								
Ast	3.9	0.00229	mg/L	0.001814	0.00229	mg/L	0.001814	79.28%
QC value within limits for As Recovery = Not calculated								
B_t	243.7	0.00925	mg/L	0.000818	0.00925	mg/L	0.000818	8.84%
QC value within limits for B_ Recovery = Not calculated								
Bat	-9.8	-0.00012	mg/L	0.000026	-0.00012	mg/L	0.000026	21.82%
QC value within limits for Ba Recovery = Not calculated								
Bet	86.9	0.00003	mg/L	0.000018	0.00003	mg/L	0.000018	66.42%
QC value within limits for Be Recovery = Not calculated								
Cat	30.5	0.00310	mg/L	0.001607	0.00310	mg/L	0.001607	51.90%
QC value within limits for Ca Recovery = Not calculated								
Cdt	6.1	0.00022	mg/L	0.000199	0.00022	mg/L	0.000199	89.24%
QC value within limits for Cd Recovery = Not calculated								
Cot	2.1	0.00009	mg/L	0.000001	0.00009	mg/L	0.000001	0.60%
QC value within limits for Co Recovery = Not calculated								
Crt	-8.5	-0.00012	mg/L	0.000113	-0.00012	mg/L	0.000113	93.53%
QC value within limits for Cr Recovery = Not calculated								
Cut	61.7	0.00014	mg/L	0.000355	0.00014	mg/L	0.000355	245.65%
QC value within limits for Cu Recovery = Not calculated								
Fet	-1.0	-0.00055	mg/L	0.001017	-0.00055	mg/L	0.001017	184.80%
QC value within limits for Fe Recovery = Not calculated								
Kt	-68.3	-0.0516	mg/L	0.00375	-0.0516	mg/L	0.00375	7.28%
QC value within limits for K Recovery = Not calculated								
Mgt	2.5	0.00060	mg/L	0.000565	0.00060	mg/L	0.000565	93.49%
QC value within limits for Mg Recovery = Not calculated								
Mnt	-236.6	-0.00043	mg/L	0.000013	-0.00043	mg/L	0.000013	2.94%
QC value within limits for Mn Recovery = Not calculated								
Mot	5.7	0.00038	mg/L	0.000179	0.00038	mg/L	0.000179	46.73%
QC value within limits for Mo Recovery = Not calculated								
Nat	39.5	0.0117	mg/L	0.01933	0.0117	mg/L	0.01933	164.53%
QC value within limits for Na Recovery = Not calculated								
Nit	-2.5	-0.00011	mg/L	0.000088	-0.00011	mg/L	0.000088	77.83%
QC value within limits for Ni Recovery = Not calculated								
Pbt	14.5	0.00271	mg/L	0.000425	0.00271	mg/L	0.000425	15.71%
QC value within limits for Pb Recovery = Not calculated								
Sbt	-5.7	-0.00358	mg/L	0.000335	-0.00358	mg/L	0.000335	9.36%
QC value within limits for Sb Recovery = Not calculated								
Set	-6.1	-0.00404	mg/L	0.001636	-0.00404	mg/L	0.001636	40.53%
QC value within limits for Se Recovery = Not calculated								
Tlt	7.8	0.00262	mg/L	0.000248	0.00262	mg/L	0.000248	9.47%
QC value within limits for Tl Recovery = Not calculated								
Vt	-28.4	-0.00018	mg/L	0.000190	-0.00018	mg/L	0.000190	108.38%
QC value within limits for V Recovery = Not calculated								
Znt	14.9	0.00029	mg/L	0.000332	0.00029	mg/L	0.000332	112.83%
QC value within limits for Zn Recovery = Not calculated								
Alxt	25.8	0.255	ug/L	0.0912	0.00025	mg/L	0.000091	35.79%
QC value within limits for Alx Recovery = Not calculated								
Bext	86.9	0.0265	ug/L	0.01761	0.00003	mg/L	0.000018	66.42%

QC value within limits for Bex Recovery = Not calculated
QC Failed. Retry.

Sequence No.: 13
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 0
Date Collected: 8/13/2007 19:45:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	267577.8	104	%	0.4				0.41%
Yr	253537.2	97.2	%	0.51				0.52%
Agt	2423.5	0.0118	mg/L	0.00087	0.0118	mg/L	0.00087	7.34%
QC value greater than the upper limit for Ag Recovery = Not calculated								
Alt	28.5	0.00581	mg/L	0.003644	0.00581	mg/L	0.003644	62.73%
QC value within limits for Al Recovery = Not calculated								
Ast	0.4	0.00023	mg/L	0.004127	0.00023	mg/L	0.004127	>999.9%
QC value within limits for As Recovery = Not calculated								
B_t	166.2	0.00631	mg/L	0.000262	0.00631	mg/L	0.000262	4.15%
QC value within limits for B_ Recovery = Not calculated								
Bat	-6.8	-0.00008	mg/L	0.000025	-0.00008	mg/L	0.000025	30.37%
QC value within limits for Ba Recovery = Not calculated								
Bet	210.7	0.00006	mg/L	0.000012	0.00006	mg/L	0.000012	19.06%
QC value within limits for Be Recovery = Not calculated								
Cat	24.1	0.00244	mg/L	0.000027	0.00244	mg/L	0.000027	1.09%
QC value within limits for Ca Recovery = Not calculated								
Cdt	1.7	0.00007	mg/L	0.000076	0.00007	mg/L	0.000076	109.36%
QC value within limits for Cd Recovery = Not calculated								
Cot	-3.8	-0.00017	mg/L	0.000216	-0.00017	mg/L	0.000216	130.12%
QC value within limits for Co Recovery = Not calculated								
Crt	-4.4	-0.00006	mg/L	0.000040	-0.00006	mg/L	0.000040	62.53%
QC value within limits for Cr Recovery = Not calculated								
Cut	8.7	0.00002	mg/L	0.000087	0.00002	mg/L	0.000087	429.06%
QC value within limits for Cu Recovery = Not calculated								
Fet	-0.5	-0.00028	mg/L	0.001366	-0.00028	mg/L	0.001366	482.81%
QC value within limits for Fe Recovery = Not calculated								
Kt	-57.0	-0.0430	mg/L	0.04269	-0.0430	mg/L	0.04269	99.25%
QC value within limits for K Recovery = Not calculated								
Mgt	1.7	0.00043	mg/L	0.000068	0.00043	mg/L	0.000068	15.85%
QC value within limits for Mg Recovery = Not calculated								
Mnt	-250.3	-0.00046	mg/L	0.000002	-0.00046	mg/L	0.000002	0.35%
QC value within limits for Mn Recovery = Not calculated								
Mot	3.5	0.00024	mg/L	0.000021	0.00024	mg/L	0.000021	8.82%
QC value within limits for Mo Recovery = Not calculated								
Nat	9.6	0.00285	mg/L	0.006064	0.00285	mg/L	0.006064	212.43%
QC value within limits for Na Recovery = Not calculated								
Nit	-5.9	-0.00027	mg/L	0.000215	-0.00027	mg/L	0.000215	78.77%
QC value within limits for Ni Recovery = Not calculated								
Pbt	7.8	0.00147	mg/L	0.000617	0.00147	mg/L	0.000617	42.06%
QC value within limits for Pb Recovery = Not calculated								
Sbt	1.8	0.00115	mg/L	0.002330	0.00115	mg/L	0.002330	202.13%
QC value within limits for Sb Recovery = Not calculated								
Set	-1.1	-0.00071	mg/L	0.004101	-0.00071	mg/L	0.004101	573.66%
QC value within limits for Se Recovery = Not calculated								
Tlt	6.5	0.00218	mg/L	0.000825	0.00218	mg/L	0.000825	37.88%
QC value within limits for Tl Recovery = Not calculated								
Vt	3.6	0.00002	mg/L	0.000246	0.00002	mg/L	0.000246	>999.9%
QC value within limits for V Recovery = Not calculated								
Znt	3.6	0.00007	mg/L	0.000098	0.00007	mg/L	0.000098	136.31%
QC value within limits for Zn Recovery = Not calculated								
Alxt	29.4	0.290	ug/L	0.5995	0.00029	mg/L	0.000600	206.73%
QC value within limits for Alx Recovery = Not calculated								

Bex†	210.7	0.0643 ug/L	0.01225	0.00006 mg/L	0.000012	19.06%

QC value within limits for Bex Recovery = Not calculated
QC Failed. Retry.

Sequence No.: 14 **Autosampler Location: 0**
Sample ID: ICB **Date Collected: 8/13/2007 19:48:10**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	261103.4	101	%	0.1				0.09%
Yr	256503.5	98.4	%	0.06				0.06%
Ag†	1884.1	0.00920	mg/L	0.000656	0.00920	mg/L	0.000656	7.12%
QC value within limits for Ag Recovery = Not calculated								
Al†	-8.6	-0.00175	mg/L	0.005845	-0.00175	mg/L	0.005845	333.95%
QC value within limits for Al Recovery = Not calculated								
As†	2.7	0.00160	mg/L	0.000163	0.00160	mg/L	0.000163	10.14%
QC value within limits for As Recovery = Not calculated								
B_†	131.1	0.00498	mg/L	0.000275	0.00498	mg/L	0.000275	5.52%
QC value within limits for B_ Recovery = Not calculated								
Ba†	-5.8	-0.00007	mg/L	0.000036	-0.00007	mg/L	0.000036	51.24%
QC value within limits for Ba Recovery = Not calculated								
Be†	37.4	0.00001	mg/L	0.000013	0.00001	mg/L	0.000013	116.81%
QC value within limits for Be Recovery = Not calculated								
Ca†	3.5	0.00036	mg/L	0.000041	0.00036	mg/L	0.000041	11.46%
QC value within limits for Ca Recovery = Not calculated								
Cd†	2.7	0.00009	mg/L	0.000099	0.00009	mg/L	0.000099	112.08%
QC value within limits for Cd Recovery = Not calculated								
Co†	-0.8	-0.00004	mg/L	0.000365	-0.00004	mg/L	0.000365	>999.9%
QC value within limits for Co Recovery = Not calculated								
Cr†	1.1	0.00002	mg/L	0.000003	0.00002	mg/L	0.000003	21.42%
QC value within limits for Cr Recovery = Not calculated								
Cu†	96.3	0.00023	mg/L	0.000128	0.00023	mg/L	0.000128	56.82%
QC value within limits for Cu Recovery = Not calculated								
Fe†	0.2	0.00010	mg/L	0.001586	0.00010	mg/L	0.001586	>999.9%
QC value within limits for Fe Recovery = Not calculated								
K†	-4.6	-0.00344	mg/L	0.008090	-0.00344	mg/L	0.008090	235.22%
QC value within limits for K Recovery = Not calculated								
Mg†	3.1	0.00075	mg/L	0.000717	0.00075	mg/L	0.000717	95.24%
QC value within limits for Mg Recovery = Not calculated								
Mn†	-244.7	-0.00045	mg/L	0.000029	-0.00045	mg/L	0.000029	6.40%
QC value within limits for Mn Recovery = Not calculated								
Mo†	1.3	0.00009	mg/L	0.000168	0.00009	mg/L	0.000168	191.10%
QC value within limits for Mo Recovery = Not calculated								
Na†	37.3	0.0111	mg/L	0.01356	0.0111	mg/L	0.01356	122.46%
QC value within limits for Na Recovery = Not calculated								
Ni†	0.5	0.00002	mg/L	0.000457	0.00002	mg/L	0.000457	>999.9%
QC value within limits for Ni Recovery = Not calculated								
Pb†	7.9	0.00148	mg/L	0.000252	0.00148	mg/L	0.000252	17.07%
QC value within limits for Pb Recovery = Not calculated								
Sb†	-4.0	-0.00251	mg/L	0.001990	-0.00251	mg/L	0.001990	79.18%
QC value within limits for Sb Recovery = Not calculated								
Se†	-5.8	-0.00389	mg/L	0.000287	-0.00389	mg/L	0.000287	7.38%
QC value within limits for Se Recovery = Not calculated								
Tl†	3.1	0.00105	mg/L	0.000695	0.00105	mg/L	0.000695	66.39%
QC value within limits for Tl Recovery = Not calculated								
V†	-28.7	-0.00018	mg/L	0.000032	-0.00018	mg/L	0.000032	18.28%
QC value within limits for V Recovery = Not calculated								
Zn†	10.3	0.00020	mg/L	0.000000	0.00020	mg/L	0.000000	0.22%
QC value within limits for Zn Recovery = Not calculated								
Alx†	72.5	0.716	ug/L	0.7370	0.00072	mg/L	0.000737	102.95%

QC value within limits for Alx Recovery = Not calculated

Bex†	37.4	0.0114 ug/L	0.01333	0.00001 mg/L	0.000013 116.81%

QC value within limits for Bex Recovery = Not calculated

All analyte(s) passed QC.

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

Autosampler Location: 16
Date Collected: 8/13/2007 19:57:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: FILTER_CHECK

Analyte	Back Pressure	Flow
All	220.0 kPa	0.65 L/min

Mean Data: FILTER_CHECK

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Sca	264917.0	103	%	1.0				0.98%
Yr	254463.6	97.6	%	1.18				1.21%
B_t	37.5	0.00142	mg/L	0.000264	0.00142	mg/L	0.000264	18.54%
Bat	-10.2	-0.00012	mg/L	0.000002	-0.00012	mg/L	0.000002	1.66%
Bet	8.3	0.00000	mg/L	0.000016	0.00000	mg/L	0.000016	649.81%
Cat	-94.8	-0.00962	mg/L	0.001093	-0.00962	mg/L	0.001093	11.35%
Cdt	-4.3	-0.00018	mg/L	0.000030	-0.00018	mg/L	0.000030	16.01%
Cot	-0.6	-0.00002	mg/L	0.000266	-0.00002	mg/L	0.000266	>999.9%
Crt	-13.3	-0.00019	mg/L	0.000209	-0.00019	mg/L	0.000209	110.50%
Cut	-43.0	-0.00010	mg/L	0.000069	-0.00010	mg/L	0.000069	68.62%
Fet	-1.9	-0.00107	mg/L	0.001705	-0.00107	mg/L	0.001705	159.79%
Kt	-85.6	-0.0646	mg/L	0.00869	-0.0646	mg/L	0.00869	13.44%
Mgt	0.2	0.00005	mg/L	0.001443	0.00005	mg/L	0.001443	>999.9%
Mot	-4.6	-0.00031	mg/L	0.000299	-0.00031	mg/L	0.000299	96.14%
Nat	12.8	0.00380	mg/L	0.012744	0.00380	mg/L	0.012744	335.32%
Nit	-0.9	-0.00004	mg/L	0.000056	-0.00004	mg/L	0.000056	135.80%
Pbt	9.7	0.00181	mg/L	0.000826	0.00181	mg/L	0.000826	45.52%
Tlt	2.8	0.00094	mg/L	0.002544	0.00094	mg/L	0.002544	270.58%
Vt	12.8	0.00008	mg/L	0.000019	0.00008	mg/L	0.000019	24.25%
Znt	-145.5	-0.00287	mg/L	0.000062	-0.00287	mg/L	0.000062	2.18%

Sequence No.: 15
Sample ID: MRL6010
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 24
Data Collected: 8/14/2007 09:10:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MRL6010

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: MRL6010

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	631584.6	105	%	1.9				1.84%
Yr	370573.9	104	%	1.7				1.62%
Agt	2817.4	0.0102	mg/L	0.00004	0.0102	mg/L	0.00004	0.42%
Alt	295.9	0.0630	mg/L	0.00334	0.0630	mg/L	0.00334	5.30%
Ast	219.1	0.0968	mg/L	0.00138	0.0968	mg/L	0.00138	1.42%
B_t	1695.1	0.0528	mg/L	0.00050	0.0528	mg/L	0.00050	0.94%
Bat	1517.5	0.0207	mg/L	0.00024	0.0207	mg/L	0.00024	1.16%
Bet	3286.1	0.00112	mg/L	0.000013	0.00112	mg/L	0.000013	1.17%
Cat	10009.6	1.08	mg/L	0.001	1.08	mg/L	0.001	0.05%
Cdt	170.8	0.00463	mg/L	0.000023	0.00463	mg/L	0.000023	0.49%
Cct	1446.6	0.0533	mg/L	0.00073	0.0533	mg/L	0.00073	1.37%
Crt	757.8	0.00994	mg/L	0.000101	0.00994	mg/L	0.000101	1.01%
Cut	3947.0	0.0107	mg/L	0.00006	0.0107	mg/L	0.00006	0.55%
Fet	37.5	0.0231	mg/L	0.00074	0.0231	mg/L	0.00074	3.21%
Kt	1321.2	1.01	mg/L	0.021	1.01	mg/L	0.021	2.07%
Mgt	481.9	0.108	mg/L	0.0020	0.108	mg/L	0.0020	1.87%
Mnt	1238.9	0.00225	mg/L	0.000037	0.00225	mg/L	0.000037	1.63%
Mot	263.9	0.0199	mg/L	0.00056	0.0199	mg/L	0.00056	2.81%
Nat	3160.7	1.06	mg/L	0.011	1.06	mg/L	0.011	1.04%
Nit	479.6	0.0213	mg/L	0.00029	0.0213	mg/L	0.00029	1.34%
Pbt	111.7	0.0228	mg/L	0.00164	0.0228	mg/L	0.00164	7.20%
Sbt	92.6	0.0445	mg/L	0.00018	0.0445	mg/L	0.00018	0.39%
Set	145.3	0.103	mg/L	0.0036	0.103	mg/L	0.0036	3.52%
Tlt	325.5	0.112	mg/L	0.0011	0.112	mg/L	0.0011	0.98%
Vt	310.5	0.00194	mg/L	0.000295	0.00194	mg/L	0.000295	15.24%
Znt	1198.5	0.0240	mg/L	0.00061	0.0240	mg/L	0.00061	2.53%
Alxt	7148.3	74.4	ug/L	0.88	0.0744	mg/L	0.00088	1.19%
Bext	3286.1	1.12	ug/L	0.013	0.00112	mg/L	0.000013	1.17%

MRL 6010 Run from 070814 8/14/07

Sequence No.: 51
Sample ID: MBLANK
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 65
Date Collected: 8/13/2007 22:15:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MBLANK

Analyte	Back Pressure	Flow
All	219.0 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	272091.5	106	%	0.1				0.05%
Yr	256622.2	98.4	%	1.32				1.34%
B_t	586.2	0.0223	mg/L	0.00049	0.0223	mg/L	0.00049	2.20%
Bat	-4.1	-0.00005	mg/L	0.000012	-0.00005	mg/L	0.000012	23.69%
Bet	2.0	0.00000	mg/L	0.000022	0.00000	mg/L	0.000022	>999.9%
Cat	277.1	0.0281	mg/L	0.00098	0.0281	mg/L	0.00098	3.47%
Cdt	-4.2	-0.00018	mg/L	0.000024	-0.00018	mg/L	0.000024	13.12%
Cot	-4.5	-0.00020	mg/L	0.000092	-0.00020	mg/L	0.000092	46.73%
Crt	49.2	0.00070	mg/L	0.000052	0.00070	mg/L	0.000052	7.49%
Cut	-134.5	-0.00031	mg/L	0.000012	-0.00031	mg/L	0.000012	3.71%
Fet	2.7	0.00148	mg/L	0.001573	0.00148	mg/L	0.001573	106.63%
Kt	-37.1	-0.0280	mg/L	0.05695	-0.0280	mg/L	0.05695	203.18%
Mgt	7.6	0.00186	mg/L	0.000032	0.00186	mg/L	0.000032	1.74%
Mot	-5.3	-0.00036	mg/L	0.000081	-0.00036	mg/L	0.000081	22.74%
Nat	1555.6	0.462	mg/L	0.0199	0.462	mg/L	0.0199	4.30%
Nit	-13.3	-0.00061	mg/L	0.000007	-0.00061	mg/L	0.000007	1.20%
Pbt	10.7	0.00200	mg/L	0.000165	0.00200	mg/L	0.000165	8.25%
Tlt	-4.0	-0.00135	mg/L	0.001537	-0.00135	mg/L	0.001537	113.95%
Vt	-34.7	-0.00021	mg/L	0.000041	-0.00021	mg/L	0.000041	19.75%
Znt	10.7	0.00022	mg/L	0.000133	0.00022	mg/L	0.000133	61.85%

Sequence No.: 52
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/13/2007 22:19:07
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	255497.5	99.1	%	1.19				1.20%
Yr	239926.8	92.0	%	1.11				1.21%
B_†	61863.0	2.34	mg/L	0.004	2.34	mg/L	0.004	0.17%
QC value within limits for B_	Recovery = 93.53%							
Ba†	385327.2	4.71	mg/L	0.008	4.71	mg/L	0.008	0.17%
QC value within limits for Ba	Recovery = 94.28%							
Be†	6173198.5	1.88	mg/L	0.024	1.88	mg/L	0.024	1.26%
QC value within limits for Be	Recovery = 94.13%							
Ca†	510116.8	51.8	mg/L	0.24	51.8	mg/L	0.24	0.45%
QC value within limits for Ca	Recovery = 103.60%							
Cd†	57565.9	2.48	mg/L	0.013	2.48	mg/L	0.013	0.51%
QC value within limits for Cd	Recovery = 99.26%							
Co†	111438.6	4.92	mg/L	0.016	4.92	mg/L	0.016	0.33%
QC value within limits for Co	Recovery = 98.31%							
Cr†	333813.3	4.75	mg/L	0.011	4.75	mg/L	0.011	0.23%
QC value within limits for Cr	Recovery = 95.10%							
Cu†	1942983.5	4.55	mg/L	0.006	4.55	mg/L	0.006	0.13%
QC value within limits for Cu	Recovery = 91.04%							
Fe†	9123.1	4.99	mg/L	0.059	4.99	mg/L	0.059	1.18%
QC value within limits for Fe	Recovery = 99.87%							
K†	64778.9	48.9	mg/L	0.94	48.9	mg/L	0.94	1.92%
QC value within limits for K	Recovery = 97.77%							
Mg†	216044.9	53.2	mg/L	0.21	53.2	mg/L	0.21	0.40%
QC value within limits for Mg	Recovery = 106.36%							
Mo†	68779.8	4.61	mg/L	0.017	4.61	mg/L	0.017	0.38%
QC value within limits for Mo	Recovery = 92.22%							
Na†	174707.8	51.9	mg/L	0.49	51.9	mg/L	0.49	0.94%
QC value within limits for Na	Recovery = 103.83%							
Ni†	105831.7	4.86	mg/L	0.021	4.86	mg/L	0.021	0.43%
QC value within limits for Ni	Recovery = 97.17%							
Pb†	26190.7	4.90	mg/L	0.012	4.90	mg/L	0.012	0.25%
QC value within limits for Pb	Recovery = 97.90%							
Tl†	15060.8	5.07	mg/L	0.011	5.07	mg/L	0.011	0.22%
QC value within limits for Tl	Recovery = 101.37%							
V†	765603.1	4.71	mg/L	0.006	4.74	mg/L	0.006	0.13%
QC value within limits for V	Recovery = 94.78%							
Zn†	251112.8	4.91	mg/L	0.010	4.91	mg/L	0.010	0.19%
QC value within limits for Zn	Recovery = 98.30%							

All analyte(s) passed QC.

Sequence No.: 53 **Autosampler Location:** 0
Sample ID: CCB **Date Collected:** 8/13/2007 22:22:24
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	263714.6	102	%	1.2				1.14%
Yr	239977.5	92.0	%	0.74				0.80%
B_†	567.8	0.0216	mg/L	0.00031	0.0216	mg/L	0.00031	1.46%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	-8.6	-0.00011	mg/L	0.000012	-0.00011	mg/L	0.000012	11.31%
QC value within limits for Ba Recovery = Not calculated								
Be†	-21.1	-0.00001	mg/L	0.000007	-0.00001	mg/L	0.000007	107.25%
QC value within limits for Be Recovery = Not calculated								
Ca†	24.5	0.00249	mg/L	0.000821	0.00249	mg/L	0.000821	32.99%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-0.7	-0.00003	mg/L	0.000075	-0.00003	mg/L	0.000075	251.22%
QC value within limits for Cd Recovery = Not calculated								
Co†	-1.0	-0.00004	mg/L	0.000152	-0.00004	mg/L	0.000152	347.10%
QC value within limits for Co Recovery = Not calculated								
Cr†	73.7	0.00105	mg/L	0.000077	0.00105	mg/L	0.000077	7.33%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-148.7	-0.00035	mg/L	0.000157	-0.00035	mg/L	0.000157	45.24%
QC value within limits for Cu Recovery = Not calculated								
Fe†	1.2	0.00068	mg/L	0.000603	0.00068	mg/L	0.000603	88.62%
QC value within limits for Fe Recovery = Not calculated								
K†	-36.8	-0.0278	mg/L	0.08694	-0.0278	mg/L	0.08694	313.19%
QC value within limits for K Recovery = Not calculated								
Mg†	-1.0	-0.00024	mg/L	0.000987	-0.00024	mg/L	0.000987	410.24%
QC value within limits for Mg Recovery = Not calculated								
Mo†	11.7	0.00079	mg/L	0.000383	0.00079	mg/L	0.000383	48.81%
QC value within limits for Mo Recovery = Not calculated								
Na†	702.7	0.209	mg/L	0.0283	0.209	mg/L	0.0283	13.55%
QC value within limits for Na Recovery = Not calculated								
Ni†	-3.8	-0.00017	mg/L	0.000145	-0.00017	mg/L	0.000145	82.97%
QC value within limits for Ni Recovery = Not calculated								
Pb†	6.6	0.00124	mg/L	0.000894	0.00124	mg/L	0.000894	72.29%
QC value within limits for Pb Recovery = Not calculated								
Tl†	-4.7	-0.00159	mg/L	0.000931	-0.00159	mg/L	0.000931	58.51%
QC value within limits for Tl Recovery = Not calculated								
V†	40.3	0.00025	mg/L	0.000013	0.00025	mg/L	0.000013	5.30%
QC value within limits for V Recovery = Not calculated								
Zn†	-10.5	-0.00021	mg/L	0.000112	-0.00021	mg/L	0.000112	54.32%
QC value within limits for Zn Recovery = Not calculated								

QC Failed. Retry.

Sequence No.: 54 **Autosampler Location:** 0
Sample ID: CCB **Date Collected:** 8/13/2007 22:24:59
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	263110.2	102	%	2.0				1.99%
Yr	243202.1	93.3	%	0.73				0.78%
B_t	415.3	0.0158	mg/L	0.00007	0.0158	mg/L	0.00007	0.46%
QC value within limits for B_	Recovery = Not calculated							
Bat	-14.3	-0.00017	mg/L	0.000057	-0.00017	mg/L	0.000057	32.94%
QC value within limits for Ba	Recovery = Not calculated							
Bet	43.6	0.00001	mg/L	0.000025	0.00001	mg/L	0.000025	187.82%
QC value within limits for Be	Recovery = Not calculated							
Cat	2.8	0.00028	mg/L	0.000424	0.00028	mg/L	0.000424	150.58%
QC value within limits for Ca	Recovery = Not calculated							
Cdt	-0.6	-0.00003	mg/L	0.000006	-0.00003	mg/L	0.000006	21.55%
QC value within limits for Cd	Recovery = Not calculated							
Cot	-5.4	-0.00024	mg/L	0.000001	-0.00024	mg/L	0.000001	0.53%
QC value within limits for Co	Recovery = Not calculated							
Crt	66.5	0.00095	mg/L	0.000081	0.00095	mg/L	0.000081	8.52%
QC value within limits for Cr	Recovery = Not calculated							
Cut	-95.0	-0.00022	mg/L	0.000148	-0.00022	mg/L	0.000148	66.37%
QC value within limits for Cu	Recovery = Not calculated							
Fet	-0.7	-0.00039	mg/L	0.000304	-0.00039	mg/L	0.000304	77.47%
QC value within limits for Fe	Recovery = Not calculated							
Kt	-59.6	-0.0450	mg/L	0.00580	-0.0450	mg/L	0.00580	12.89%
QC value within limits for K	Recovery = Not calculated							
Mgt	3.6	0.00089	mg/L	0.000513	0.00089	mg/L	0.000513	57.73%
QC value within limits for Mg	Recovery = Not calculated							
Mot	3.6	0.00024	mg/L	0.000002	0.00024	mg/L	0.000002	0.82%
QC value within limits for Mo	Recovery = Not calculated							
Nat	569.8	0.169	mg/L	0.0080	0.169	mg/L	0.0080	4.74%
QC value within limits for Na	Recovery = Not calculated							
Nit	-7.3	-0.00033	mg/L	0.000405	-0.00033	mg/L	0.000405	121.02%
QC value within limits for Ni	Recovery = Not calculated							
Pbt	10.4	0.00195	mg/L	0.001244	0.00195	mg/L	0.001244	63.82%
QC value within limits for Pb	Recovery = Not calculated							
Tlt	3.7	0.00124	mg/L	0.001867	0.00124	mg/L	0.001867	150.59%
QC value within limits for Tl	Recovery = Not calculated							
Vt	-53.3	-0.00032	mg/L	0.000224	-0.00032	mg/L	0.000224	69.52%
QC value within limits for V	Recovery = Not calculated							
Znt	-15.0	-0.00029	mg/L	0.000110	-0.00029	mg/L	0.000110	37.37%
QC value within limits for Zn	Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 55
Sample ID: LCS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 66
Date Collected: 8/13/2007 22:28:27
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	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	264996.0	103	%	0.2				0.20%
Yr	245285.8	94.1	%	1.67				1.77%
B_t	12443.2	0.470	mg/L	0.0021	0.470	mg/L	0.0021	0.45%
Bat	74830.4	0.915	mg/L	0.0033	0.915	mg/L	0.0033	0.36%
Bet	156464.8	0.0477	mg/L	0.00009	0.0477	mg/L	0.00009	0.19%
Cat	489841.2	49.7	mg/L	0.08	49.7	mg/L	0.08	0.16%
Cdt	4918.1	0.214	mg/L	0.0006	0.214	mg/L	0.0006	0.29%
Cot	21889.1	0.966	mg/L	0.0020	0.966	mg/L	0.0020	0.21%
Crt	65294.3	0.930	mg/L	0.0007	0.930	mg/L	0.0007	0.08%
Cut	391302.3	0.917	mg/L	0.0056	0.917	mg/L	0.0056	0.61%
Fet	9289.6	5.08	mg/L	0.107	5.08	mg/L	0.107	2.11%
Kt	25690.6	19.4	mg/L	0.54	19.4	mg/L	0.54	2.80%
Mgt	84657.6	20.8	mg/L	0.56	20.8	mg/L	0.56	2.66%
Mot	13451.6	0.902	mg/L	0.0002	0.902	mg/L	0.0002	0.02%
Nat	167611.9	49.8	mg/L	0.01	49.8	mg/L	0.01	0.02%
Nit	10322.2	0.474	mg/L	0.0008	0.474	mg/L	0.0008	0.18%
Pbt	5217.4	0.975	mg/L	0.0026	0.975	mg/L	0.0026	0.27%
Tlt	3007.2	1.01	mg/L	0.002	1.01	mg/L	0.002	0.16%
Vt	149310.1	0.924	mg/L	0.0012	0.924	mg/L	0.0012	0.13%
Znt	49981.5	0.982	mg/L	0.0035	0.982	mg/L	0.0035	0.36%

Sequence No.: 56
Sample ID: LCSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 67
Date Collected: 8/13/2007 22:31:30
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	261723.2	101	%	0.4				0.35%
Yr	240493.3	92.2	%	0.25				0.27%
B_t	12161.4	0.460	mg/L	0.0020	0.460	mg/L	0.0020	0.43%
Bat	73529.3	0.899	mg/L	0.0057	0.899	mg/L	0.0057	0.63%
Bet	153512.9	0.0468	mg/L	0.00029	0.0468	mg/L	0.00029	0.62%
Cat	488655.3	49.6	mg/L	0.03	49.6	mg/L	0.03	0.07%
Cdt	4932.8	0.215	mg/L	0.0014	0.215	mg/L	0.0014	0.63%
Cot	21933.0	0.967	mg/L	0.0086	0.967	mg/L	0.0086	0.89%
Crt	63988.8	0.911	mg/L	0.0068	0.911	mg/L	0.0068	0.74%
Cut	386002.9	0.904	mg/L	0.0066	0.904	mg/L	0.0066	0.73%
Fet	9200.8	5.04	mg/L	0.067	5.04	mg/L	0.067	1.33%
Kt	25750.3	19.4	mg/L	0.29	19.4	mg/L	0.29	1.49%
Mgt	84367.7	20.8	mg/L	0.37	20.8	mg/L	0.37	1.79%
Mot	13462.3	0.902	mg/L	0.0066	0.902	mg/L	0.0066	0.73%
Nat	168201.3	50.0	mg/L	0.30	50.0	mg/L	0.30	0.60%
Nit	10315.7	0.474	mg/L	0.0040	0.474	mg/L	0.0040	0.83%
Pbt	5262.4	0.984	mg/L	0.0087	0.984	mg/L	0.0087	0.89%
Tlt	3036.1	1.02	mg/L	0.009	1.02	mg/L	0.009	0.87%
Vt	146019.1	0.904	mg/L	0.0059	0.904	mg/L	0.0059	0.66%
Znt	49080.3	0.964	mg/L	0.0070	0.964	mg/L	0.0070	0.73%

Sequence No.: 57
Sample ID: 2708020327_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 68
Date Collected: 8/13/2007 22:34:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708020327_2X

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: 2708020327_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	241027.7	93.5	%	0.68				0.73%
Yr	231542.9	88.8	%	0.33				0.37%
B_t	55600.5	2.11	mg/L	0.007	4.22	mg/L	0.014	0.33%
Bat	591.9	0.00724	mg/L	0.000014	0.0145	mg/L	0.00003	0.19%
Bet	-1307.5	-0.00040	mg/L	0.000029	-0.00080	mg/L	0.000057	7.16%
Cat	2311569.3	235	mg/L	0.3	469	mg/L	0.6	0.14%
Cdt	27.5	0.00118	mg/L	0.000231	0.00236	mg/L	0.000462	19.59%
Cot	-2.6	-0.00011	mg/L	0.000100	-0.00023	mg/L	0.000200	88.06%
Crt	33973.4	0.484	mg/L	0.0015	0.968	mg/L	0.0030	0.31%
Cut	473.9	0.00111	mg/L	0.000111	0.00222	mg/L	0.000223	10.04%
Fet	7.9	0.00432	mg/L	0.002404	0.00864	mg/L	0.004808	55.64%
Kt	14223.3	10.7	mg/L	0.04	21.5	mg/L	0.07	0.33%
Mgt	545822.9	134	mg/L	0.1	269	mg/L	0.2	0.08%
Mot	458.4	0.0307	mg/L	0.00047	0.0615	mg/L	0.00093	1.52%
Nat	1535923.3	456	mg/L	0.1	913	mg/L	0.3	0.03%
Nit	1.4	0.00006	mg/L	0.000469	0.00013	mg/L	0.000938	736.60%
Pbt	-39.3	-0.00735	mg/L	0.000047	-0.0147	mg/L	0.00009	0.64%
Tlt	55.9	0.0188	mg/L	0.00101	0.0377	mg/L	0.00202	5.36%
Vt	3953.2	0.0270	mg/L	0.00027	0.0540	mg/L	0.00054	1.00%
Znt	326.4	0.00643	mg/L	0.000016	0.0129	mg/L	0.00003	0.25%

Sequence No.: 58
Sample ID: 2708020327_2XMS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 69
Date Collected: 8/13/2007 22:38:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708020327_2XMS

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708020327_2XMS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	239056.5	92.7	%	0.51				0.55%
Yr	235407.5	90.3	%	0.19				0.21%
B_†	62274.7	2.36	mg/L	0.005	4.73	mg/L	0.009	0.20%
Ba†	37853.2	0.463	mg/L	0.0004	0.926	mg/L	0.0008	0.08%
Be†	75492.4	0.0230	mg/L	0.00003	0.0460	mg/L	0.00005	0.12%
Ca†	2585423.8	263	mg/L	0.8	525	mg/L	1.6	0.31%
Cd†	2592.4	0.113	mg/L	0.0013	0.225	mg/L	0.0026	1.13%
Co†	10737.7	0.474	mg/L	0.0048	0.947	mg/L	0.0096	1.02%
Cr†	66050.6	0.941	mg/L	0.0017	1.88	mg/L	0.003	0.18%
Cu†	201255.4	0.471	mg/L	0.0019	0.943	mg/L	0.0039	0.41%
Fe†	4580.3	2.51	mg/L	0.013	5.01	mg/L	0.027	0.53%
K†	28293.0	21.4	mg/L	0.14	42.7	mg/L	0.29	0.67%
Mg†	594567.3	146	mg/L	0.2	293	mg/L	0.3	0.11%
Mo†	7225.1	0.484	mg/L	0.0052	0.969	mg/L	0.0104	1.07%
Na†	1654723.8	492	mg/L	1.0	983	mg/L	2.0	0.21%
Ni†	5006.3	0.230	mg/L	0.0016	0.460	mg/L	0.0032	0.71%
Pb†	2485.1	0.464	mg/L	0.0053	0.929	mg/L	0.0106	1.14%
Tl†	1452.1	0.489	mg/L	0.0023	0.978	mg/L	0.0047	0.48%
V†	78545.1	0.489	mg/L	0.0004	0.977	mg/L	0.0008	0.08%
Zn†	25565.9	0.502	mg/L	0.0052	1.00	mg/L	0.010	1.04%

Sequence No.: 59
Sample ID: 2708020327_2XMSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 70
Date Collected: 8/13/2007 22:42:43
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708020327_2XMSD

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708020327_2XMSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	238310.0	92.4	%	1.14				1.24%
Yr	234523.9	90.0	%	0.06				0.07%
B_t	61632.9	2.34	mg/L	0.008	4.68	mg/L	0.017	0.36%
Bat	37354.6	0.457	mg/L	0.0013	0.914	mg/L	0.0026	0.29%
Bet	74572.0	0.0227	mg/L	0.00005	0.0455	mg/L	0.00009	0.20%
Cat	2549597.2	259	mg/L	0.1	518	mg/L	0.3	0.05%
Cdt	2572.6	0.112	mg/L	0.0012	0.224	mg/L	0.0023	1.03%
Cot	10618.0	0.468	mg/L	0.0052	0.937	mg/L	0.0104	1.11%
Crt	65380.2	0.931	mg/L	0.0005	1.86	mg/L	0.001	0.05%
Cut	199147.7	0.467	mg/L	0.0013	0.933	mg/L	0.0027	0.29%
Fet	4555.8	2.49	mg/L	0.042	4.99	mg/L	0.083	1.67%
Kt	28039.9	21.2	mg/L	0.35	42.3	mg/L	0.71	1.68%
Mgt	586302.0	144	mg/L	0.1	289	mg/L	0.2	0.06%
Mot	7155.7	0.480	mg/L	0.0068	0.959	mg/L	0.0136	1.42%
Nat	1620502.7	482	mg/L	0.4	963	mg/L	0.8	0.08%
Nit	4962.3	0.228	mg/L	0.0033	0.456	mg/L	0.0066	1.45%
Pbt	2465.2	0.461	mg/L	0.0054	0.921	mg/L	0.0108	1.17%
Tlt	1448.1	0.487	mg/L	0.0036	0.975	mg/L	0.0071	0.73%
Vt	77770.3	0.484	mg/L	0.0006	0.968	mg/L	0.0012	0.13%
Znt	25323.3	0.497	mg/L	0.0065	0.995	mg/L	0.0130	1.31%

Sequence No.: 65
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/13/2007 23:08:15
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	255060.2	98.9	%	2.25				2.27%
Yr	238126.6	91.3	%	0.83				0.91%
B_†	61303.3	2.32	mg/L	0.001	2.32	mg/L	0.001	0.03%
QC value within limits for B_	Recovery = 92.68%							
Ba†	384419.9	4.70	mg/L	0.025	4.70	mg/L	0.025	0.53%
QC value within limits for Ba	Recovery = 94.05%							
Be†	6159058.1	1.88	mg/L	0.025	1.88	mg/L	0.025	1.32%
QC value within limits for Be	Recovery = 93.91%							
Ca†	511362.4	51.9	mg/L	0.02	51.9	mg/L	0.02	0.05%
QC value within limits for Ca	Recovery = 103.85%							
Cd†	57680.7	2.49	mg/L	0.045	2.49	mg/L	0.045	1.80%
QC value within limits for Cd	Recovery = 99.46%							
Co†	111920.3	4.94	mg/L	0.077	4.94	mg/L	0.077	1.56%
QC value within limits for Co	Recovery = 98.74%							
Cr†	332241.9	4.73	mg/L	0.020	4.73	mg/L	0.020	0.42%
QC value within limits for Cr	Recovery = 94.65%							
Cu†	1928918.5	4.52	mg/L	0.005	4.52	mg/L	0.005	0.11%
QC value within limits for Cu	Recovery = 90.38%							
Fe†	9289.4	5.08	mg/L	0.014	5.08	mg/L	0.014	0.27%
QC value within limits for Fe	Recovery = 101.70%							
K†	66050.3	49.8	mg/L	0.25	49.8	mg/L	0.25	0.49%
QC value within limits for K	Recovery = 99.69%							
Mg†	216989.8	53.4	mg/L	0.06	53.4	mg/L	0.06	0.12%
QC value within limits for Mg	Recovery = 106.82%							
Mo†	68978.9	4.62	mg/L	0.078	4.62	mg/L	0.078	1.68%
QC value within limits for Mo	Recovery = 92.48%							
Na†	173366.4	51.5	mg/L	0.15	51.5	mg/L	0.15	0.29%
QC value within limits for Na	Recovery = 103.03%							
Ni†	106118.6	4.87	mg/L	0.077	4.87	mg/L	0.077	1.58%
QC value within limits for Ni	Recovery = 97.43%							
Pb†	26236.5	4.90	mg/L	0.085	4.90	mg/L	0.085	1.74%
QC value within limits for Pb	Recovery = 98.07%							
Tl†	15094.8	5.08	mg/L	0.100	5.08	mg/L	0.100	1.96%
QC value within limits for Tl	Recovery = 101.60%							
V†	761801.9	4.72	mg/L	0.017	4.72	mg/L	0.017	0.35%
QC value within limits for V	Recovery = 94.31%							
Zn†	250101.9	4.89	mg/L	0.016	4.89	mg/L	0.016	0.33%
QC value within limits for Zn	Recovery = 97.90%							

All analyte(s) passed QC.

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

Autosampler Location: 0
Date Collected: 8/13/2007 23:11:30
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.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	267376.9	104	%	0.4				0.41%
Yr	239780.1	92.0	%	1.15				1.25%
B_†	436.4	0.0166	mg/L	0.00066	0.0166	mg/L	0.00066	3.98%
QC value within limits for B_	Recovery = Not calculated							
Ba†	-10.0	-0.00012	mg/L	0.000022	-0.00012	mg/L	0.000022	17.71%
QC value within limits for Ba	Recovery = Not calculated							
Be†	-33.9	-0.00001	mg/L	0.000025	-0.00001	mg/L	0.000025	237.29%
QC value within limits for Be	Recovery = Not calculated							
Ca†	31.8	0.00323	mg/L	0.001265	0.00323	mg/L	0.001265	39.19%
QC value within limits for Ca	Recovery = Not calculated							
Cd†	0.7	0.00003	mg/L	0.000191	0.00003	mg/L	0.000191	611.25%
QC value within limits for Cd	Recovery = Not calculated							
Co†	-3.9	-0.00017	mg/L	0.000202	-0.00017	mg/L	0.000202	117.61%
QC value within limits for Co	Recovery = Not calculated							
Cr†	154.4	0.00220	mg/L	0.000126	0.00220	mg/L	0.000126	5.73%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	-35.2	-0.00008	mg/L	0.000222	-0.00008	mg/L	0.000222	268.75%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	-2.3	-0.00124	mg/L	0.000848	-0.00124	mg/L	0.000848	68.32%
QC value within limits for Fe	Recovery = Not calculated							
K†	-56.1	-0.0423	mg/L	0.02832	-0.0423	mg/L	0.02832	66.90%
QC value within limits for K	Recovery = Not calculated							
Mg†	-0.0	-0.00001	mg/L	0.000170	-0.00001	mg/L	0.000170	>999.9%
QC value within limits for Mg	Recovery = Not calculated							
Mo†	12.6	0.00085	mg/L	0.000218	0.00085	mg/L	0.000218	25.75%
QC value within limits for Mo	Recovery = Not calculated							
Na†	538.7	0.160	mg/L	0.0011	0.160	mg/L	0.0011	0.68%
QC value within limits for Na	Recovery = Not calculated							
Ni†	-5.1	-0.00023	mg/L	0.000302	-0.00023	mg/L	0.000302	129.34%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	5.8	0.00108	mg/L	0.000262	0.00108	mg/L	0.000262	24.21%
QC value within limits for Pb	Recovery = Not calculated							
Tl†	2.2	0.00073	mg/L	0.000805	0.00073	mg/L	0.000805	110.18%
QC value within limits for Tl	Recovery = Not calculated							
V†	-7.8	-0.00004	mg/L	0.000332	-0.00004	mg/L	0.000332	930.84%
QC value within limits for V	Recovery = Not calculated							
Zn†	-7.9	-0.00015	mg/L	0.000019	-0.00015	mg/L	0.000019	12.31%
QC value within limits for Zn	Recovery = Not calculated							

All analyte(s) passed QC.

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

Autosampler Location: 5
Date Collected: 8/13/2007 23:14:55
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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	265143.1	103	%	0.7				0.67%
Yr	240774.4	92.4	%	0.25				0.27%
B_†	30337.9	1.15	mg/L	0.000	1.15	mg/L	0.000	0.01%
QC value within limits for B_	Recovery = 91.73%							
Ba†	193030.8	2.36	mg/L	0.007	2.36	mg/L	0.007	0.29%
QC value within limits for Ba	Recovery = 94.46%							
Be†	3055934.9	0.932	mg/L	0.0018	0.932	mg/L	0.0018	0.19%
QC value within limits for Be	Recovery = 93.19%							
Ca†	258177.9	26.2	mg/L	0.04	26.2	mg/L	0.04	0.15%
QC value within limits for Ca	Recovery = 104.86%							
Cd†	28695.6	1.24	mg/L	0.001	1.24	mg/L	0.001	0.09%
QC value within limits for Cd	Recovery = 98.96%							
Co†	55554.3	2.45	mg/L	0.007	2.45	mg/L	0.007	0.28%
QC value within limits for Co	Recovery = 98.02%							
Cr†	165594.2	2.36	mg/L	0.005	2.36	mg/L	0.005	0.20%
QC value within limits for Cr	Recovery = 94.35%							
Cu†	954512.5	2.24	mg/L	0.013	2.24	mg/L	0.013	0.57%
QC value less than the lower limit for Cu	Recovery = 89.45%							
Fe†	4713.7	2.58	mg/L	0.025	2.58	mg/L	0.025	0.97%
QC value within limits for Fe	Recovery = 103.21%							
K†	32831.4	24.8	mg/L	0.07	24.8	mg/L	0.07	0.28%
QC value within limits for K	Recovery = 99.11%							
Mg†	110042.9	27.1	mg/L	0.04	27.1	mg/L	0.04	0.13%
QC value within limits for Mg	Recovery = 108.35%							
Mo†	33949.6	2.28	mg/L	0.001	2.28	mg/L	0.001	0.07%
QC value within limits for Mo	Recovery = 91.04%							
Na†	87123.8	25.9	mg/L	0.16	25.9	mg/L	0.16	0.63%
QC value within limits for Na	Recovery = 103.56%							
Ni†	53627.2	2.46	mg/L	0.004	2.46	mg/L	0.004	0.18%
QC value within limits for Ni	Recovery = 98.47%							
Pb†	13144.2	2.46	mg/L	0.006	2.46	mg/L	0.006	0.25%
QC value within limits for Pb	Recovery = 98.27%							
Tl†	7622.0	2.57	mg/L	0.005	2.57	mg/L	0.005	0.21%
QC value within limits for Tl	Recovery = 102.60%							
V†	378320.9	2.34	mg/L	0.002	2.34	mg/L	0.002	0.10%
QC value within limits for V	Recovery = 93.68%							
Zn†	125530.1	2.46	mg/L	0.007	2.46	mg/L	0.007	0.27%
QC value within limits for Zn	Recovery = 98.27%							

QC Failed. Retry.

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

Autosampler Location: 5
Date Collected: 8/13/2007 23:16:29
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	260760.4	101	%	0.9				0.91%
Yr	242020.1	92.8	%	0.56				0.60%
B_†	30642.8	1.16	mg/L	0.005	1.16	mg/L	0.005	0.47%
QC value within limits for B_ Recovery = 92.66%								
Ba†	193983.8	2.37	mg/L	0.008	2.37	mg/L	0.008	0.35%
QC value within limits for Ba Recovery = 94.92%								
Be†	3063766.1	0.934	mg/L	0.0039	0.934	mg/L	0.0039	0.41%
QC value within limits for Be Recovery = 93.43%								
Ca†	258980.5	26.3	mg/L	0.00	26.3	mg/L	0.00	0.01%
QC value within limits for Ca Recovery = 105.19%								
Cd†	28810.0	1.24	mg/L	0.030	1.24	mg/L	0.030	2.38%
QC value within limits for Cd Recovery = 99.35%								
Co†	55639.1	2.45	mg/L	0.007	2.45	mg/L	0.007	0.29%
QC value within limits for Co Recovery = 98.17%								
Cr†	165824.8	2.36	mg/L	0.013	2.36	mg/L	0.013	0.54%
QC value within limits for Cr Recovery = 94.48%								
Cu†	957249.2	2.24	mg/L	0.002	2.24	mg/L	0.002	0.07%
QC value less than the lower limit for Cu Recovery = 89.70%								
Fe†	4828.8	2.64	mg/L	0.002	2.64	mg/L	0.002	0.08%
QC value within limits for Fe Recovery = 105.73%								
K†	33740.5	25.5	mg/L	0.10	25.5	mg/L	0.10	0.41%
QC value within limits for K Recovery = 101.85%								
Mg†	110394.1	27.2	mg/L	0.03	27.2	mg/L	0.03	0.11%
QC value within limits for Mg Recovery = 108.69%								
Mo†	34154.9	2.29	mg/L	0.046	2.29	mg/L	0.046	2.03%
QC value within limits for Mo Recovery = 91.59%								
Na†	86965.2	25.8	mg/L	0.08	25.8	mg/L	0.08	0.29%
QC value within limits for Na Recovery = 103.37%								
Ni†	53807.3	2.47	mg/L	0.055	2.47	mg/L	0.055	2.22%
QC value within limits for Ni Recovery = 98.80%								
Pb†	13239.8	2.47	mg/L	0.049	2.47	mg/L	0.049	1.98%
QC value within limits for Pb Recovery = 98.98%								
Tl†	7630.8	2.57	mg/L	0.038	2.57	mg/L	0.038	1.49%
QC value within limits for Tl Recovery = 102.72%								
V†	379103.6	2.35	mg/L	0.010	2.35	mg/L	0.010	0.43%
QC value within limits for V Recovery = 93.87%								
Zn†	126264.2	2.47	mg/L	0.009	2.47	mg/L	0.009	0.36%
QC value within limits for Zn Recovery = 98.84%								

QC Failed. Continue with analysis.

Sequence No.: 79
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/14/2007 00:03:49
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	256098.4	99.3	%	0.64				0.65%
Yr	242139.6	92.9	%	0.69				0.74%
B_†	61615.1	2.33	mg/L	0.000	2.33	mg/L	0.000	0.01%
QC value within limits for B_ Recovery = 93.16%								
Ba†	379822.8	4.65	mg/L	0.013	4.65	mg/L	0.013	0.29%
QC value within limits for Ba Recovery = 92.93%								
Be†	6017582.8	1.84	mg/L	0.008	1.84	mg/L	0.008	0.42%
QC value within limits for Be Recovery = 91.75%								
Ca†	514030.8	52.2	mg/L	0.00	52.2	mg/L	0.00	0.01%
QC value within limits for Ca Recovery = 104.39%								
Cd†	57347.0	2.47	mg/L	0.001	2.47	mg/L	0.001	0.04%
QC value within limits for Cd Recovery = 98.88%								
Co†	110941.5	4.89	mg/L	0.001	4.89	mg/L	0.001	0.02%
QC value within limits for Co Recovery = 97.88%								
Cr†	331968.4	4.73	mg/L	0.007	4.73	mg/L	0.007	0.15%
QC value within limits for Cr Recovery = 94.57%								
Cu†	1905913.9	4.46	mg/L	0.008	4.46	mg/L	0.008	0.19%
QC value less than the lower limit for Cu Recovery = 89.30%								
Fe†	9217.0	5.05	mg/L	0.102	5.05	mg/L	0.102	2.02%
QC value within limits for Fe Recovery = 100.90%								
K†	65397.3	49.4	mg/L	0.94	49.4	mg/L	0.94	1.90%
QC value within limits for K Recovery = 98.71%								
Mg†	218974.7	53.9	mg/L	0.10	53.9	mg/L	0.10	0.19%
QC value within limits for Mg Recovery = 107.80%								
Mo†	67975.1	4.56	mg/L	0.002	4.56	mg/L	0.002	0.03%
QC value within limits for Mo Recovery = 91.14%								
Na†	175059.6	52.0	mg/L	0.07	52.0	mg/L	0.07	0.14%
QC value within limits for Na Recovery = 104.04%								
Ni†	104959.0	4.82	mg/L	0.009	4.82	mg/L	0.009	0.19%
QC value within limits for Ni Recovery = 96.37%								
Pb†	25872.9	4.84	mg/L	0.003	4.84	mg/L	0.003	0.06%
QC value within limits for Pb Recovery = 96.71%								
Tl†	14888.3	5.01	mg/L	0.019	5.01	mg/L	0.019	0.38%
QC value within limits for Tl Recovery = 100.21%								
V†	758797.5	4.70	mg/L	0.002	4.70	mg/L	0.002	0.04%
QC value within limits for V Recovery = 93.94%								
Zn†	248513.8	4.86	mg/L	0.005	4.86	mg/L	0.005	0.10%
QC value within limits for Zn Recovery = 97.28%								

QC Failed. Retry.

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

Autosampler Location: 4
Date Collected: 8/14/2007 00:05:25
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	256984.1	99.6	%	0.42				0.42%
Yr	237686.2	91.2	%	1.79				1.96%
B_†	62416.1	2.36	mg/L	0.004	2.36	mg/L	0.004	0.19%
QC value within limits for B_	Recovery = 94.37%							
Ba†	381259.1	4.66	mg/L	0.041	4.66	mg/L	0.041	0.88%
QC value within limits for Ba	Recovery = 93.28%							
Be†	6053367.6	1.85	mg/L	0.009	1.85	mg/L	0.009	0.47%
QC value within limits for Be	Recovery = 92.30%							
Ca†	513599.1	52.2	mg/L	0.11	52.2	mg/L	0.11	0.20%
QC value within limits for Ca	Recovery = 104.30%							
Cd†	58225.9	2.51	mg/L	0.024	2.51	mg/L	0.024	0.97%
QC value within limits for Cd	Recovery = 100.40%							
Co†	112586.5	4.97	mg/L	0.046	4.97	mg/L	0.046	0.93%
QC value within limits for Co	Recovery = 99.33%							
Cr†	332962.3	4.74	mg/L	0.019	4.74	mg/L	0.019	0.40%
QC value within limits for Cr	Recovery = 94.85%							
Cu†	1932291.8	4.53	mg/L	0.047	4.53	mg/L	0.047	1.04%
QC value within limits for Cu	Recovery = 90.54%							
Fe†	9306.1	5.09	mg/L	0.040	5.09	mg/L	0.040	0.79%
QC value within limits for Fe	Recovery = 101.88%							
K†	65549.4	49.5	mg/L	0.64	49.5	mg/L	0.64	1.29%
QC value within limits for K	Recovery = 98.94%							
Mg†	218823.3	53.9	mg/L	0.04	53.9	mg/L	0.04	0.07%
QC value within limits for Mg	Recovery = 107.73%							
Mo†	69214.5	4.64	mg/L	0.033	4.64	mg/L	0.033	0.72%
QC value within limits for Mo	Recovery = 92.80%							
Na†	172936.5	51.4	mg/L	0.25	51.4	mg/L	0.25	0.50%
QC value within limits for Na	Recovery = 102.78%							
Ni†	106801.6	4.90	mg/L	0.050	4.90	mg/L	0.050	1.01%
QC value within limits for Ni	Recovery = 98.06%							
Pb†	26352.3	4.93	mg/L	0.035	4.93	mg/L	0.035	0.71%
QC value within limits for Pb	Recovery = 98.50%							
Tl†	15044.5	5.06	mg/L	0.045	5.06	mg/L	0.045	0.88%
QC value within limits for Tl	Recovery = 101.26%							
V†	760314.8	4.71	mg/L	0.023	4.71	mg/L	0.023	0.48%
QC value within limits for V	Recovery = 94.13%							
Zn†	250560.1	4.90	mg/L	0.026	4.90	mg/L	0.026	0.53%
QC value within limits for Zn	Recovery = 98.07%							

All analyte(s) passed QC.

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

Autosampler Location: 0
Date Collected: 8/14/2007 00:08:36
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	269767.6	105	%	0.4				0.37%
Yr	244325.4	93.7	%	1.67				1.78%
B_†	806.3	0.0306	mg/L	0.00101	0.0306	mg/L	0.00101	3.29%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	-12.5	-0.00015	mg/L	0.000049	-0.00015	mg/L	0.000049	32.09%
QC value within limits for Ba Recovery = Not calculated								
Be†	-43.0	-0.00001	mg/L	0.000003	-0.00001	mg/L	0.000003	25.29%
QC value within limits for Be Recovery = Not calculated								
Ca†	39.0	0.00396	mg/L	0.001388	0.00396	mg/L	0.001388	35.09%
QC value within limits for Ca Recovery = Not calculated								
Cd†	1.8	0.00008	mg/L	0.000021	0.00008	mg/L	0.000021	27.24%
QC value within limits for Cd Recovery = Not calculated								
Co†	-4.1	-0.00018	mg/L	0.000088	-0.00018	mg/L	0.000088	48.45%
QC value within limits for Co Recovery = Not calculated								
Cr†	115.5	0.00165	mg/L	0.000054	0.00165	mg/L	0.000054	3.29%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-140.4	-0.00033	mg/L	0.000095	-0.00033	mg/L	0.000095	28.98%
QC value within limits for Cu Recovery = Not calculated								
Fe†	-0.0	-0.00003	mg/L	0.001379	-0.00003	mg/L	0.001379	>999.9%
QC value within limits for Fe Recovery = Not calculated								
K†	-99.3	-0.0749	mg/L	0.04318	-0.0749	mg/L	0.04318	57.65%
QC value within limits for K Recovery = Not calculated								
Mg†	2.4	0.00059	mg/L	0.000068	0.00059	mg/L	0.000068	11.44%
QC value within limits for Mg Recovery = Not calculated								
Mo†	17.6	0.00118	mg/L	0.000363	0.00118	mg/L	0.000363	30.67%
QC value within limits for Mo Recovery = Not calculated								
Na†	689.4	0.205	mg/L	0.0007	0.205	mg/L	0.0007	0.35%
QC value within limits for Na Recovery = Not calculated								
Ni†	-9.5	-0.00044	mg/L	0.000383	-0.00044	mg/L	0.000383	87.38%
QC value within limits for Ni Recovery = Not calculated								
Pb†	13.1	0.00244	mg/L	0.000139	0.00244	mg/L	0.000139	5.69%
QC value within limits for Pb Recovery = Not calculated								
Tl†	6.0	0.00202	mg/L	0.001123	0.00202	mg/L	0.001123	55.53%
QC value within limits for Tl Recovery = Not calculated								
V†	-50.4	-0.00030	mg/L	0.000224	-0.00030	mg/L	0.000224	74.58%
QC value within limits for V Recovery = Not calculated								
Zn†	-1.6	-0.00003	mg/L	0.000009	-0.00003	mg/L	0.000009	30.85%
QC value within limits for Zn Recovery = Not calculated								

QC Failed. Retry.

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

Autosampler Location: 0
Date Collected: 8/14/2007 00:11:14
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	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	267904.9	104	%	1.0				0.99%
Yr	247948.0	95.1	%	0.23				0.25%
B_†	604.0	0.0229	mg/L	0.00077	0.0229	mg/L	0.00077	3.35%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	-10.9	-0.00013	mg/L	0.000033	-0.00013	mg/L	0.000033	24.59%
QC value within limits for Ba Recovery = Not calculated								
Be†	-75.2	-0.00002	mg/L	0.000003	-0.00002	mg/L	0.000003	11.60%
QC value within limits for Be Recovery = Not calculated								
Ca†	32.0	0.00325	mg/L	0.000652	0.00325	mg/L	0.000652	20.06%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-1.6	-0.00007	mg/L	0.000092	-0.00007	mg/L	0.000092	128.77%
QC value within limits for Cd Recovery = Not calculated								
Co†	-3.8	-0.00017	mg/L	0.000139	-0.00017	mg/L	0.000139	82.95%
QC value within limits for Co Recovery = Not calculated								
Cr†	90.3	0.00129	mg/L	0.000078	0.00129	mg/L	0.000078	6.09%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-205.1	-0.00048	mg/L	0.000012	-0.00048	mg/L	0.000012	2.52%
QC value within limits for Cu Recovery = Not calculated								
Fe†	-1.3	-0.00071	mg/L	0.000839	-0.00071	mg/L	0.000839	117.93%
QC value within limits for Fe Recovery = Not calculated								
K†	-84.1	-0.0635	mg/L	0.10102	-0.0635	mg/L	0.10102	159.11%
QC value within limits for K Recovery = Not calculated								
Mg†	2.4	0.00059	mg/L	0.000310	0.00059	mg/L	0.000310	52.33%
QC value within limits for Mg Recovery = Not calculated								
Mo†	4.5	0.00030	mg/L	0.000199	0.00030	mg/L	0.000199	65.76%
QC value within limits for Mo Recovery = Not calculated								
Na†	585.0	0.174	mg/L	0.0073	0.174	mg/L	0.0073	4.18%
QC value within limits for Na Recovery = Not calculated								
Ni†	-8.8	-0.00041	mg/L	0.000291	-0.00041	mg/L	0.000291	71.72%
QC value within limits for Ni Recovery = Not calculated								
Pb†	6.4	0.00120	mg/L	0.000170	0.00120	mg/L	0.000170	14.21%
QC value within limits for Pb Recovery = Not calculated								
Tl†	0.2	0.00006	mg/L	0.000533	0.00006	mg/L	0.000533	821.64%
QC value within limits for Tl Recovery = Not calculated								
V†	34.7	0.00022	mg/L	0.000009	0.00022	mg/L	0.000009	4.09%
QC value within limits for V Recovery = Not calculated								
Zn†	-11.6	-0.00023	mg/L	0.000227	-0.00023	mg/L	0.000227	100.58%
QC value within limits for Zn Recovery = Not calculated								

QC Failed. Retry.

Sequence No.: 83
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 8/14/2007 00:13:50
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	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	267902.3	104	%	0.1				0.06%
Yr	244814.2	93.9	%	1.13				1.20%
B_†	480.4	0.0182	mg/L	0.00028	0.0182	mg/L	0.00028	1.55%
QC value within limits for B_ Recovery = Not calculated								
Ba†	-3.2	-0.00004	mg/L	0.000029	-0.00004	mg/L	0.000029	75.89%
QC value within limits for Ba Recovery = Not calculated								
Be†	-20.0	-0.00001	mg/L	0.000023	-0.00001	mg/L	0.000023	382.36%
QC value within limits for Be Recovery = Not calculated								
Ca†	53.6	0.00544	mg/L	0.001167	0.00544	mg/L	0.001167	21.44%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-8.0	-0.00034	mg/L	0.000010	-0.00034	mg/L	0.000010	3.05%
QC value within limits for Cd Recovery = Not calculated								
Co†	-3.2	-0.00014	mg/L	0.000015	-0.00014	mg/L	0.000015	10.44%

QC value within limits for Co Recovery = Not calculated

Cr†	72.6	0.00103 mg/L	0.000002	0.00103 mg/L	0.000002	0.20%
QC value within limits for Cr Recovery = Not calculated						
Cu†	-236.0	-0.00055 mg/L	0.000077	-0.00055 mg/L	0.000077	13.94%
QC value within limits for Cu Recovery = Not calculated						
Fe†	-0.5	-0.00030 mg/L	0.003873	-0.00030 mg/L	0.003873	>999.9%
QC value within limits for Fe Recovery = Not calculated						
K†	-102.9	-0.0776 mg/L	0.04931	-0.0776 mg/L	0.04931	63.52%
QC value within limits for K Recovery = Not calculated						
Mg†	4.8	0.00117 mg/L	0.000431	0.00117 mg/L	0.000431	36.72%
QC value within limits for Mg Recovery = Not calculated						
Mo†	1.2	0.00008 mg/L	0.000216	0.00008 mg/L	0.000216	279.52%
QC value within limits for Mo Recovery = Not calculated						
Na†	564.0	0.168 mg/L	0.0104	0.168 mg/L	0.0104	6.18%
QC value within limits for Na Recovery = Not calculated						
Ni†	-12.6	-0.00058 mg/L	0.000181	-0.00058 mg/L	0.000181	31.31%
QC value within limits for Ni Recovery = Not calculated						
Pb†	6.2	0.00116 mg/L	0.000265	0.00116 mg/L	0.000265	22.87%
QC value within limits for Pb Recovery = Not calculated						
Tl†	1.1	0.00036 mg/L	0.001900	0.00036 mg/L	0.001900	526.75%
QC value within limits for Tl Recovery = Not calculated						
V†	-9.2	-0.00005 mg/L	0.000024	-0.00005 mg/L	0.000024	47.09%
QC value within limits for V Recovery = Not calculated						
Zn†	-21.6	-0.00042 mg/L	0.000123	-0.00042 mg/L	0.000123	29.13%
QC value within limits for Zn Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 86
Sample ID: 2708030224_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 88
Date Collected: 8/14/2007 00:25:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030224_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030224_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	261982.2	102	%	0.5				0.50%
Yr	242092.3	92.9	%	0.19				0.20%
B_t	45128.7	1.71	mg/L	0.009	3.43	mg/L	0.018	0.54%
Bat	1018.8	0.0125	mg/L	0.00004	0.0249	mg/L	0.00008	0.32%
Bet	-1032.8	-0.00031	mg/L	0.000009	-0.00063	mg/L	0.000017	2.72%
Cat	856547.4	87.0	mg/L	0.05	174	mg/L	0.1	0.06%
Cdt	12.5	0.00053	mg/L	0.000235	0.00107	mg/L	0.000470	43.94%
Cot	-7.2	-0.00032	mg/L	0.000049	-0.00063	mg/L	0.000098	15.44%
Crt	65491.8	0.933	mg/L	0.0018	1.87	mg/L	0.004	0.19%
Cut	380.0	0.00089	mg/L	0.000029	0.00178	mg/L	0.000057	3.21%
Fet	125.5	0.0687	mg/L	0.00131	0.137	mg/L	0.0026	1.91%
Kt	8414.2	6.35	mg/L	0.149	12.7	mg/L	0.30	2.35%
Mgt	205133.9	50.5	mg/L	0.09	101	mg/L	0.2	0.18%
Mot	110.5	0.00741	mg/L	0.000133	0.0148	mg/L	0.00027	1.80%
Nat	716728.7	213	mg/L	0.2	426	mg/L	0.3	0.08%
Nit	1.9	0.00009	mg/L	0.000291	0.00017	mg/L	0.000582	342.04%
Pbt	-7.5	-0.00140	mg/L	0.001269	-0.00280	mg/L	0.002539	90.55%
Tlt	32.4	0.0109	mg/L	0.00090	0.0218	mg/L	0.00180	8.26%
Vt	2872.1	0.0228	mg/L	0.00027	0.0457	mg/L	0.00055	1.20%
Znt	334.8	0.00660	mg/L	0.000005	0.0132	mg/L	0.00001	0.07%

Sequence No.: 87
Sample ID: 2708030225_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 89
Date Collected: 8/14/2007 00:29:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030225_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030225_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	248245.7	96.3	%	0.21				0.22%
Yr	235833.8	90.5	%	0.05				0.06%
B_t	53633.1	2.04	mg/L	0.008	4.07	mg/L	0.017	0.42%
Bat	643.0	0.00787	mg/L	0.000093	0.0157	mg/L	0.00019	1.18%
Bet	-1097.7	-0.00033	mg/L	0.000010	-0.00067	mg/L	0.000021	3.08%
Cat	1789570.2	182	mg/L	0.2	363	mg/L	0.4	0.12%
Cdt	31.9	0.00136	mg/L	0.000183	0.00273	mg/L	0.000365	13.40%
Cot	-13.9	-0.00061	mg/L	0.000061	-0.00122	mg/L	0.000121	9.89%
Crt	26738.4	0.381	mg/L	0.0024	0.762	mg/L	0.0048	0.62%
Cut	522.9	0.00122	mg/L	0.000233	0.00245	mg/L	0.000467	19.08%
Fet	-3.7	-0.00204	mg/L	0.000369	-0.00409	mg/L	0.000739	18.08%
Kt	16037.7	12.1	mg/L	0.05	24.2	mg/L	0.10	0.42%
Mgt	524175.4	129	mg/L	0.3	258	mg/L	0.6	0.22%
Mot	769.0	0.0516	mg/L	0.00010	0.103	mg/L	0.0002	0.19%
Nat	2245774.8	667	mg/L	3.0	1330	mg/L	6.0	0.45%
Nit	10.0	0.00046	mg/L	0.000286	0.00092	mg/L	0.000573	62.48%
Pbt	-35.7	-0.00667	mg/L	0.001151	-0.0133	mg/L	0.00230	17.25%
Tlt	47.7	0.0161	mg/L	0.00416	0.0322	mg/L	0.00833	25.88%
Vt	3892.3	0.0261	mg/L	0.00025	0.0521	mg/L	0.00051	0.97%
Znt	465.8	0.00918	mg/L	0.000112	0.0184	mg/L	0.00022	1.23%

Sequence No.: 88
Sample ID: 2708030226_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 90
Date Collected: 8/14/2007 00:34:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030226_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030226_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	258741.8	100	%	1.0				1.00%
Yr	240239.2	92.1	%	0.98				1.06%
B_t	45147.3	1.71	mg/L	0.004	3.43	mg/L	0.008	0.22%
Bat	745.2	0.00912	mg/L	0.000044	0.0182	mg/L	0.00009	0.48%
Bet	-1085.7	-0.00033	mg/L	0.000017	-0.00066	mg/L	0.000034	5.06%
Cat	1578803.6	160	mg/L	0.6	321	mg/L	1.3	0.40%
Cdt	-0.2	-0.00001	mg/L	0.000120	-0.00002	mg/L	0.000239	>999.9%
Cot	3.2	0.00014	mg/L	0.000172	0.00028	mg/L	0.000343	121.29%
Crt	101270.8	1.44	mg/L	0.006	2.89	mg/L	0.011	0.38%
Cut	402.1	0.00094	mg/L	0.000047	0.00188	mg/L	0.000094	4.99%
Fet	111.4	0.0610	mg/L	0.00351	0.122	mg/L	0.0070	5.75%
Kt	10380.6	7.83	mg/L	0.104	15.7	mg/L	0.21	1.33%
Mgt	392718.1	96.7	mg/L	0.19	193	mg/L	0.4	0.19%
Mot	123.2	0.00826	mg/L	0.000066	0.0165	mg/L	0.00013	0.80%
Nat	793450.0	236	mg/L	0.2	472	mg/L	0.4	0.09%
Nit	-8.8	-0.00040	mg/L	0.000524	-0.00081	mg/L	0.001047	130.04%
Pbt	-27.0	-0.00505	mg/L	0.000130	-0.0101	mg/L	0.00026	2.57%
Tlt	39.9	0.0134	mg/L	0.00036	0.0268	mg/L	0.00072	2.67%
Vt	1491.9	0.0171	mg/L	0.00030	0.0343	mg/L	0.00061	1.78%
Znt	347.5	0.00685	mg/L	0.000236	0.0137	mg/L	0.00047	3.45%

Sequence No.: 89
Sample ID: 2708030227_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 91
Date Collected: 8/14/2007 00:38:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030227_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030227_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	245106.2	95.0	%	0.41				0.43%
Yr	231082.4	88.6	%	0.14				0.15%
B_t	73919.9	2.81	mg/L	0.001	5.61	mg/L	0.001	0.02%
Bat	693.5	0.00848	mg/L	0.000102	0.0170	mg/L	0.00020	1.20%
Bet	-1214.0	-0.00037	mg/L	0.000016	-0.00074	mg/L	0.000032	4.38%
Cat	1762999.9	179	mg/L	2.0	358	mg/L	4.1	1.14%
Cdt	47.1	0.00201	mg/L	0.000225	0.00403	mg/L	0.000449	11.15%
Cot	-2.9	-0.00013	mg/L	0.000090	-0.00025	mg/L	0.000180	71.23%
Crt	30585.9	0.436	mg/L	0.0016	0.871	mg/L	0.0033	0.38%
Cut	653.8	0.00153	mg/L	0.000126	0.00306	mg/L	0.000252	8.24%
Fet	44.5	0.0243	mg/L	0.00151	0.0487	mg/L	0.00303	6.21%
Kt	16836.8	12.7	mg/L	0.02	25.4	mg/L	0.03	0.13%
Mgt	472263.6	116	mg/L	1.3	232	mg/L	2.6	1.10%
Mot	880.1	0.0590	mg/L	0.00086	0.118	mg/L	0.0017	1.46%
Nat	2598395.3	772	mg/L	11.9	1540	mg/L	23.7	1.54%
Nit	22.7	0.00104	mg/L	0.000194	0.00208	mg/L	0.000388	18.65%
Pbt	-37.4	-0.00699	mg/L	0.000257	-0.0140	mg/L	0.00051	3.67%
Tlt	46.1	0.0155	mg/L	0.00285	0.0310	mg/L	0.00570	18.38%
Vt	2745.5	0.0193	mg/L	0.00033	0.0386	mg/L	0.00066	1.71%
Znt	424.3	0.00835	mg/L	0.000149	0.0167	mg/L	0.00030	1.79%

Sequence No.: 90
Sample ID: MBLANK
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 92
Date Collected: 8/14/2007 00:43:06
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	279296.6	108	%	0.3				0.29%
Yr	258030.8	99.0	%	1.54				1.55%
B_t	658.8	0.0250	mg/L	0.00108	0.0250	mg/L	0.00108	4.31%
Bat	-1.6	-0.00002	mg/L	0.000007	-0.00002	mg/L	0.000007	33.06%
Bet	-24.4	-0.00001	mg/L	0.000009	-0.00001	mg/L	0.000009	121.21%
Cat	232.8	0.0236	mg/L	0.00297	0.0236	mg/L	0.00297	12.57%
Cdt	-9.3	-0.00040	mg/L	0.000186	-0.00040	mg/L	0.000186	46.54%
Cot	-7.0	-0.00031	mg/L	0.000040	-0.00031	mg/L	0.000040	12.99%
Crt	38.8	0.00055	mg/L	0.000146	0.00055	mg/L	0.000146	26.43%
Cut	-295.1	-0.00069	mg/L	0.000038	-0.00069	mg/L	0.000038	5.54%
Fet	3.8	0.00206	mg/L	0.000378	0.00206	mg/L	0.000378	18.37%
Kt	-95.5	-0.0721	mg/L	0.00881	-0.0721	mg/L	0.00881	12.22%
Mgt	19.8	0.00487	mg/L	0.000959	0.00487	mg/L	0.000959	19.70%
Mot	-6.5	-0.00044	mg/L	0.000419	-0.00044	mg/L	0.000419	95.87%
Nat	1949.1	0.579	mg/L	0.0090	0.579	mg/L	0.0090	1.55%
Nit	-10.2	-0.00047	mg/L	0.000096	-0.00047	mg/L	0.000096	20.38%
Pbt	16.2	0.00304	mg/L	0.000836	0.00304	mg/L	0.000836	27.53%
Tlt	-3.5	-0.00118	mg/L	0.000541	-0.00118	mg/L	0.000541	46.00%
Vt	-45.0	-0.00027	mg/L	0.000194	-0.00027	mg/L	0.000194	70.59%
Znt	98.2	0.00194	mg/L	0.000097	0.00194	mg/L	0.000097	5.02%

Sequence No.: 91
Sample ID: LCS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 93
Date Collected: 8/14/2007 00:46:47
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	269962.3	105	%	1.8				1.70%
Yr	248518.0	95.3	%	1.62				1.70%
B_†	12457.5	0.471	mg/L	0.0013	0.471	mg/L	0.0013	0.27%
Ba†	72789.0	0.890	mg/L	0.0004	0.890	mg/L	0.0004	0.05%
Be†	152693.8	0.0466	mg/L	0.00010	0.0466	mg/L	0.00010	0.20%
Ca†	509861.4	51.8	mg/L	0.02	51.8	mg/L	0.02	0.03%
Cd†	4886.5	0.213	mg/L	0.0038	0.213	mg/L	0.0038	1.80%
Co†	21793.3	0.961	mg/L	0.0158	0.961	mg/L	0.0158	1.64%
Cr†	64192.1	0.914	mg/L	0.0020	0.914	mg/L	0.0020	0.22%
Cu†	381888.2	0.895	mg/L	0.0011	0.895	mg/L	0.0011	0.12%
Fe†	9172.7	5.02	mg/L	0.032	5.02	mg/L	0.032	0.64%
K†	26374.8	19.9	mg/L	0.22	19.9	mg/L	0.22	1.11%
Mg†	87686.9	21.6	mg/L	0.12	21.6	mg/L	0.12	0.56%
Mo†	13196.2	0.885	mg/L	0.0136	0.885	mg/L	0.0136	1.54%
Na†	174853.1	52.0	mg/L	0.12	52.0	mg/L	0.12	0.23%
Ni†	10200.2	0.468	mg/L	0.0076	0.468	mg/L	0.0076	1.62%
Pb†	5165.8	0.965	mg/L	0.0157	0.965	mg/L	0.0157	1.62%
Tl†	2996.8	1.01	mg/L	0.012	1.01	mg/L	0.012	1.17%
V†	146266.5	0.905	mg/L	0.0013	0.905	mg/L	0.0013	0.15%
Zn†	48961.6	0.962	mg/L	0.0020	0.962	mg/L	0.0020	0.21%

Sequence No.: 92
Sample ID: LCSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 94
Date Collected: 8/14/2007 00:50:34
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	266757.3	100		1.5				1.45%
Yr	242859.3	93.2	%	0.35				0.37%
B_†	12607.2	0.477	mg/L	0.0044	0.477	mg/L	0.0044	0.93%
Ba†	74584.3	0.912	mg/L	0.0059	0.912	mg/L	0.0059	0.64%
Be†	156132.6	0.0476	mg/L	0.00033	0.0476	mg/L	0.00033	0.70%
Ca†	503289.2	51.1	mg/L	0.16	51.1	mg/L	0.16	0.32%
Cd†	5029.3	0.219	mg/L	0.0056	0.219	mg/L	0.0056	2.55%
Co†	22464.0	0.991	mg/L	0.0261	0.991	mg/L	0.0261	2.64%
Cr†	65629.3	0.935	mg/L	0.0069	0.935	mg/L	0.0069	0.74%
Cu†	389789.1	0.913	mg/L	0.0027	0.913	mg/L	0.0027	0.29%
Fe†	9432.6	5.16	mg/L	0.011	5.16	mg/L	0.011	0.21%
K†	26247.0	19.8	mg/L	0.06	19.8	mg/L	0.06	0.29%
Mg†	87230.7	21.5	mg/L	0.06	21.5	mg/L	0.06	0.28%
Mo†	13594.7	0.911	mg/L	0.0231	0.911	mg/L	0.0231	2.53%
Na†	173010.5	51.4	mg/L	0.33	51.4	mg/L	0.33	0.63%
Ni†	10505.5	0.482	mg/L	0.0124	0.482	mg/L	0.0124	2.57%
Pb†	5270.1	0.985	mg/L	0.0246	0.985	mg/L	0.0246	2.50%
Tl†	3058.4	1.03	mg/L	0.028	1.03	mg/L	0.028	2.71%
V†	149467.5	0.925	mg/L	0.0051	0.925	mg/L	0.0051	0.55%
Zn†	50034.9	0.983	mg/L	0.0082	0.983	mg/L	0.0082	0.83%

Sequence No.: 93
Sample ID: 2708040004_5X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 95
Date Collected: 8/14/2007 00:54:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708040004_5X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708040004_5X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	258462.7	100	%	5.0				5.00%
Yr	239833.7	92.0	%	0.84				0.91%
B_t	36509.6	1.39	mg/L	0.002	6.93	mg/L	0.008	0.11%
Bat	575.5	0.00704	mg/L	0.000267	0.0352	mg/L	0.00134	3.79%
Bet	-1028.1	-0.00031	mg/L	0.000033	-0.00157	mg/L	0.000165	10.50%
Cat	1111647.2	113	mg/L	0.4	564	mg/L	2.2	0.38%
Cdt	-21.0	-0.00090	mg/L	0.000297	-0.00450	mg/L	0.001484	32.99%
Cot	-10.3	-0.00046	mg/L	0.000093	-0.00228	mg/L	0.000465	20.42%
Crt	71317.4	1.02	mg/L	0.001	5.08	mg/L	0.003	0.06%
Cut	183.3	0.00043	mg/L	0.000238	0.00214	mg/L	0.001192	55.62%
Fet	5.4	0.00297	mg/L	0.002693	0.0148	mg/L	0.01347	90.74%
Kt	6840.4	5.16	mg/L	0.079	25.8	mg/L	0.39	1.52%
Mgt	220948.4	54.4	mg/L	0.02	272	mg/L	0.1	0.03%
Mot	65.3	0.00438	mg/L	0.000239	0.0219	mg/L	0.00120	5.47%
Nat	775045.7	230	mg/L	0.4	1150	mg/L	1.9	0.16%
Nit	-15.7	-0.00072	mg/L	0.000256	-0.00359	mg/L	0.001280	35.62%
Pbt	-21.3	-0.00398	mg/L	0.000867	-0.0199	mg/L	0.00433	21.79%
Tlt	49.0	0.0165	mg/L	0.00093	0.0823	mg/L	0.00466	5.66%
Vt	1043.9	0.0120	mg/L	0.00025	0.0602	mg/L	0.00124	2.07%
Znt	264.2	0.00521	mg/L	0.000585	0.0261	mg/L	0.00293	11.24%

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

Autosampler Location: 4
Date Collected: 8/14/2007 00:58:42
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	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Sca	265758.8	103	%	1.5				1.42%
Yr	246065.5	94.4	%	0.79				0.84%
B_†	61619.8	2.33	mg/L	0.006	2.33	mg/L	0.006	0.24%
QC value within limits for B_ Recovery = 93.17%								
Ba†	378741.7	4.63	mg/L	0.010	4.63	mg/L	0.010	0.23%
QC value within limits for Ba Recovery = 92.66%								
Be†	5992568.2	1.83	mg/L	0.010	1.83	mg/L	0.010	0.57%
QC value within limits for Be Recovery = 91.37%								
Ca†	517667.5	52.6	mg/L	0.10	52.6	mg/L	0.10	0.19%
QC value within limits for Ca Recovery = 105.13%								
Cd†	58370.5	2.52	mg/L	0.011	2.52	mg/L	0.011	0.44%
QC value within limits for Cd Recovery = 100.63%								
Co†	110473.5	4.87	mg/L	0.003	4.87	mg/L	0.003	0.05%
QC value within limits for Co Recovery = 97.46%								
Cr†	330549.8	4.71	mg/L	0.011	4.71	mg/L	0.011	0.23%
QC value within limits for Cr Recovery = 94.17%								
Cu†	1909676.7	4.47	mg/L	0.019	4.47	mg/L	0.019	0.43%
QC value less than the lower limit for Cu Recovery = 89.48%								
Fe†	9522.6	5.21	mg/L	0.006	5.21	mg/L	0.006	0.11%
QC value within limits for Fe Recovery = 104.25%								
K†	67297.5	50.8	mg/L	0.23	50.8	mg/L	0.23	0.44%
QC value within limits for K Recovery = 101.58%								
Mg†	220113.4	54.2	mg/L	0.12	54.2	mg/L	0.12	0.23%
QC value within limits for Mg Recovery = 108.36%								
Mo†	68777.0	4.61	mg/L	0.001	4.61	mg/L	0.001	0.01%
QC value within limits for Mo Recovery = 92.21%								
Na†	175698.5	52.2	mg/L	0.37	52.2	mg/L	0.37	0.70%
QC value within limits for Na Recovery = 104.42%								
Ni†	106997.0	4.91	mg/L	0.009	4.91	mg/L	0.009	0.19%
QC value within limits for Ni Recovery = 98.24%								
Pb†	26232.2	4.90	mg/L	0.016	4.90	mg/L	0.016	0.32%
QC value within limits for Pb Recovery = 98.06%								
Tl†	15061.7	5.07	mg/L	0.032	5.07	mg/L	0.032	0.63%
QC value within limits for Tl Recovery = 101.38%								
V†	755251.6	4.68	mg/L	0.014	4.68	mg/L	0.014	0.30%
QC value within limits for V Recovery = 93.50%								
Zn†	248366.8	4.86	mg/L	0.017	4.86	mg/L	0.017	0.34%
QC value within limits for Zn Recovery = 97.21%								

QC Failed. Retry.

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

Autosampler Location: 4
Date Collected: 8/14/2007 01:00:20
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	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sca	264696.0	103		1.2				1.22%
Yr	244728.1	93.9	%	3.41				3.64%
B_†	62010.2	2.34	mg/L	0.002	2.34	mg/L	0.002	0.10%
QC value within limits for B_ Recovery = 93.76%								
Ba†	377930.6	4.62	mg/L	0.020	4.62	mg/L	0.020	0.44%
QC value within limits for Ba Recovery = 92.47%								
Be†	5985261.4	1.83	mg/L	0.021	1.83	mg/L	0.021	1.14%
QC value within limits for Be Recovery = 91.26%								
Ca†	513576.4	52.2	mg/L	0.05	52.2	mg/L	0.05	0.10%
QC value within limits for Ca Recovery = 104.30%								
Cd†	57943.2	2.50	mg/L	0.055	2.50	mg/L	0.055	2.22%
QC value within limits for Cd Recovery = 99.90%								
Co†	110298.9	4.87	mg/L	0.020	4.87	mg/L	0.020	0.42%
QC value within limits for Co Recovery = 97.31%								
Cr†	329995.7	4.70	mg/L	0.013	4.70	mg/L	0.013	0.28%
QC value within limits for Cr Recovery = 94.01%								
Cu†	1899725.9	4.45	mg/L	0.018	4.45	mg/L	0.018	0.39%
QC value less than the lower limit for Cu Recovery = 89.01%								
Fe†	9378.4	5.13	mg/L	0.226	5.13	mg/L	0.226	4.40%
QC value within limits for Fe Recovery = 102.67%								
K†	66476.2	50.2	mg/L	2.26	50.2	mg/L	2.26	4.50%
QC value within limits for K Recovery = 100.34%								
Mg†	219030.9	53.9	mg/L	0.18	53.9	mg/L	0.18	0.33%
QC value within limits for Mg Recovery = 107.83%								
Mo†	68059.2	4.56	mg/L	0.111	4.56	mg/L	0.111	2.43%
QC value within limits for Mo Recovery = 91.25%								
Na†	173772.6	51.6	mg/L	0.45	51.6	mg/L	0.45	0.87%
QC value within limits for Na Recovery = 103.27%								
Ni†	105055.9	4.82	mg/L	0.123	4.82	mg/L	0.123	2.56%
QC value within limits for Ni Recovery = 96.45%								
Pb†	25877.4	4.84	mg/L	0.113	4.84	mg/L	0.113	2.33%
QC value within limits for Pb Recovery = 96.73%								
Tl†	14883.8	5.01	mg/L	0.128	5.01	mg/L	0.128	2.55%
QC value within limits for Tl Recovery = 100.18%								
V†	754042.8	4.67	mg/L	0.018	4.67	mg/L	0.018	0.39%
QC value within limits for V Recovery = 93.35%								
Zn†	248320.6	4.86	mg/L	0.019	4.86	mg/L	0.019	0.38%
QC value within limits for Zn Recovery = 97.20%								
QC Failed. Retry.								

Sequence No.: 96 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 8/14/2007 01:01:53**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **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	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sca	262668.4	102	%	0.3				0.34%
Yr	246547.2	94.6	%	0.67				0.71%
B_†	62391.8	2.36	mg/L	0.003	2.36	mg/L	0.003	0.15%
QC value within limits for B_ Recovery = 94.33%								
Ba†	380105.5	4.65	mg/L	0.009	4.65	mg/L	0.009	0.20%
QC value within limits for Ba Recovery = 93.00%								
Be†	5976420.7	1.82	mg/L	0.012	1.82	mg/L	0.012	0.63%
QC value within limits for Be Recovery = 91.13%								
Ca†	514278.6	52.2	mg/L	0.15	52.2	mg/L	0.15	0.29%
QC value within limits for Ca Recovery = 104.44%								
Cd†	58103.3	2.50	mg/L	0.002	2.50	mg/L	0.002	0.07%
QC value within limits for Cd Recovery = 100.19%								
Co†	112236.3	4.95	mg/L	0.007	4.95	mg/L	0.007	0.13%

QC value within limits for Co Recovery = 99.02%

Cr†	331683.5	4.72 mg/L	0.001	4.72 mg/L	0.001	0.02%

QC value within limits for Cr Recovery = 94.49%

Cu†	1907286.2	4.47 mg/L	0.001	4.47 mg/L	0.001	0.03%

QC value less than the lower limit for Cu Recovery = 89.37%

Fe†	9368.2	5.13 mg/L	0.128	5.13 mg/L	0.128	2.50%

QC value within limits for Fe Recovery = 102.56%

K†	66730.8	50.4 mg/L	1.07	50.4 mg/L	1.07	2.12%

QC value within limits for K Recovery = 100.72%

Mg†	219545.7	54.0 mg/L	0.17	54.0 mg/L	0.17	0.32%

QC value within limits for Mg Recovery = 108.08%

Mo†	68543.8	4.59 mg/L	0.007	4.59 mg/L	0.007	0.14%

QC value within limits for Mo Recovery = 91.90%

Na†	174238.4	51.8 mg/L	0.12	51.8 mg/L	0.12	0.23%

QC value within limits for Na Recovery = 103.55%

Ni†	105857.3	4.86 mg/L	0.005	4.86 mg/L	0.005	0.10%

QC value within limits for Ni Recovery = 97.19%

Pb†	26038.8	4.87 mg/L	0.013	4.87 mg/L	0.013	0.27%

QC value within limits for Pb Recovery = 97.33%

Tl†	15025.6	5.06 mg/L	0.022	5.06 mg/L	0.022	0.44%

QC value within limits for Tl Recovery = 101.14%

V†	757923.5	4.69 mg/L	0.007	4.69 mg/L	0.007	0.15%

QC value within limits for V Recovery = 93.83%

Zn†	250095.3	4.89 mg/L	0.006	4.89 mg/L	0.006	0.13%

QC value within limits for Zn Recovery = 97.90%

QC Failed. Continue with analysis.

Sequence No.: 97
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 8/14/2007 01:05:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	274593.0	106	%	2.4				2.22%
Yr	248574.1	95.3	%	0.06				0.06%
B_†	785.5	0.0298	mg/L	0.00203	0.0298	mg/L	0.00203	6.81%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	-8.2	-0.00010	mg/L	0.000002	-0.00010	mg/L	0.000002	1.54%
QC value within limits for Ba Recovery = Not calculated								
Be†	-12.5	0.00000	mg/L	0.000032	0.00000	mg/L	0.000032	841.37%
QC value within limits for Be Recovery = Not calculated								
Ca†	55.8	0.00566	mg/L	0.002960	0.00566	mg/L	0.002960	52.25%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-0.2	-0.00001	mg/L	0.000171	-0.00001	mg/L	0.000171	>999.9%
QC value within limits for Cd Recovery = Not calculated								
Co†	-2.3	-0.00010	mg/L	0.000154	-0.00010	mg/L	0.000154	152.01%
QC value within limits for Co Recovery = Not calculated								
Cr†	46.7	0.00066	mg/L	0.000150	0.00066	mg/L	0.000150	22.61%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-201.4	-0.00047	mg/L	0.000100	-0.00047	mg/L	0.000100	21.12%
QC value within limits for Cu Recovery = Not calculated								
Fe†	-0.8	-0.00042	mg/L	0.000329	-0.00042	mg/L	0.000329	79.09%
QC value within limits for Fe Recovery = Not calculated								
K†	-70.5	-0.0532	mg/L	0.00760	-0.0532	mg/L	0.00760	14.30%
QC value within limits for K Recovery = Not calculated								
Mg†	1.7	0.00041	mg/L	0.000366	0.00041	mg/L	0.000366	88.90%
QC value within limits for Mg Recovery = Not calculated								
Mo†	24.5	0.00165	mg/L	0.000263	0.00165	mg/L	0.000263	15.99%
QC value within limits for Mo Recovery = Not calculated								
Na†	654.0	0.194	mg/L	0.0116	0.194	mg/L	0.0116	5.98%
QC value within limits for Na Recovery = Not calculated								
Ni†	-11.0	-0.00050	mg/L	0.000234	-0.00050	mg/L	0.000234	46.51%
QC value within limits for Ni Recovery = Not calculated								
Pb†	8.8	0.00165	mg/L	0.001159	0.00165	mg/L	0.001159	70.26%
QC value within limits for Pb Recovery = Not calculated								
Tl†	3.2	0.00108	mg/L	0.002186	0.00108	mg/L	0.002186	201.73%
QC value within limits for Tl Recovery = Not calculated								
V†	29.7	0.00019	mg/L	0.000020	0.00019	mg/L	0.000020	10.52%
QC value within limits for V Recovery = Not calculated								
Zn†	6.5	0.00013	mg/L	0.000077	0.00013	mg/L	0.000077	58.00%
QC value within limits for Zn Recovery = Not calculated								

QC Failed. Retry.

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

Autosampler Location: 0
Date Collected: 8/14/2007 01:07:38
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	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	274784.0	107	%	0.9				0.89%
Yr	253236.5	97.1	%	4.18				4.31%
B_†	561.8	0.0213	mg/L	0.00048	0.0213	mg/L	0.00048	2.26%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	-8.1	-0.00010	mg/L	0.000000	-0.00010	mg/L	0.000000	0.35%
QC value within limits for Ba Recovery = Not calculated								
Be†	-44.3	-0.00001	mg/L	0.000006	-0.00001	mg/L	0.000006	44.76%
QC value within limits for Be Recovery = Not calculated								
Ca†	66.8	0.00679	mg/L	0.004922	0.00679	mg/L	0.004922	72.52%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-1.9	-0.00008	mg/L	0.000013	-0.00008	mg/L	0.000013	16.40%
QC value within limits for Cd Recovery = Not calculated								
Co†	-8.0	-0.00035	mg/L	0.000101	-0.00035	mg/L	0.000101	28.54%
QC value within limits for Co Recovery = Not calculated								
Cr†	25.2	0.00036	mg/L	0.000043	0.00036	mg/L	0.000043	11.93%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-157.2	-0.00037	mg/L	0.000120	-0.00037	mg/L	0.000120	32.58%
QC value within limits for Cu Recovery = Not calculated								
Fe†	-2.4	-0.00130	mg/L	0.001355	-0.00130	mg/L	0.001355	103.85%
QC value within limits for Fe Recovery = Not calculated								
K†	-47.8	-0.0361	mg/L	0.04034	-0.0361	mg/L	0.04034	111.80%
QC value within limits for K Recovery = Not calculated								
Mg†	7.2	0.00178	mg/L	0.000706	0.00178	mg/L	0.000706	39.65%
QC value within limits for Mg Recovery = Not calculated								
Mo†	8.0	0.00054	mg/L	0.000136	0.00054	mg/L	0.000136	25.40%
QC value within limits for Mo Recovery = Not calculated								
Na†	535.1	0.159	mg/L	0.0255	0.159	mg/L	0.0255	16.01%
QC value within limits for Na Recovery = Not calculated								
Ni†	-3.0	-0.00014	mg/L	0.000075	-0.00014	mg/L	0.000075	54.77%
QC value within limits for Ni Recovery = Not calculated								
Pb†	17.3	0.00324	mg/L	0.001387	0.00324	mg/L	0.001387	42.78%
QC value within limits for Pb Recovery = Not calculated								
Tl†	3.0	0.00101	mg/L	0.000664	0.00101	mg/L	0.000664	65.51%
QC value within limits for Tl Recovery = Not calculated								
V†	-27.9	-0.00017	mg/L	0.000107	-0.00017	mg/L	0.000107	62.94%
QC value within limits for V Recovery = Not calculated								
Zn†	-8.0	-0.00016	mg/L	0.000056	-0.00016	mg/L	0.000056	35.47%
QC value within limits for Zn Recovery = Not calculated								
QC Failed. Retry.								

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

Autosampler Location: 0
Date Collected: 8/14/2007 01:10:15
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	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	284068.5	110	%	2.6				2.32%
Yr	254884.6	97.8	%	2.84				2.90%
B_†	410.0	0.0156	mg/L	0.00032	0.0156	mg/L	0.00032	2.06%
QC value within limits for B_ Recovery = Not calculated								
Ba†	-9.5	-0.00012	mg/L	0.000001	-0.00012	mg/L	0.000001	1.15%
QC value within limits for Ba Recovery = Not calculated								
Be†	-16.7	-0.00001	mg/L	0.000001	-0.00001	mg/L	0.000001	12.38%
QC value within limits for Be Recovery = Not calculated								
Ca†	29.8	0.00303	mg/L	0.002072	0.00303	mg/L	0.002072	68.45%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-7.4	-0.00032	mg/L	0.000114	-0.00032	mg/L	0.000114	35.74%
QC value within limits for Cd Recovery = Not calculated								
Co†	-5.3	-0.00023	mg/L	0.000102	-0.00023	mg/L	0.000102	43.55%

QC value within limits for Co Recovery = Not calculated

Cr†	19.0	0.00027 mg/L	0.000116	0.00027 mg/L	0.000116	42.84%

QC value within limits for Cr Recovery = Not calculated

Cu†	-260.2	-0.00061 mg/L	0.000079	-0.00061 mg/L	0.000079	13.04%

QC value within limits for Cu Recovery = Not calculated

Fe†	-4.4	-0.00243 mg/L	0.000259	-0.00243 mg/L	0.000259	10.68%

QC value within limits for Fe Recovery = Not calculated

K†	-92.8	-0.0700 mg/L	0.04489	-0.0700 mg/L	0.04489	64.11%

QC value within limits for K Recovery = Not calculated

Mg†	5.6	0.00137 mg/L	0.000773	0.00137 mg/L	0.000773	56.41%

QC value within limits for Mg Recovery = Not calculated

Mo†	3.2	0.00021 mg/L	0.000114	0.00021 mg/L	0.000114	53.42%

QC value within limits for Mo Recovery = Not calculated

Na†	537.0	0.160 mg/L	0.0008	0.160 mg/L	0.0008	0.53%

QC value within limits for Na Recovery = Not calculated

Ni†	-14.9	-0.00069 mg/L	0.000083	-0.00069 mg/L	0.000083	12.05%

QC value within limits for Ni Recovery = Not calculated

Pb†	10.4	0.00194 mg/L	0.000008	0.00194 mg/L	0.000008	0.41%

QC value within limits for Pb Recovery = Not calculated

Tl†	-1.2	-0.00041 mg/L	0.000367	-0.00041 mg/L	0.000367	89.92%

QC value within limits for Tl Recovery = Not calculated

V†	-14.0	-0.00008 mg/L	0.000000	-0.00008 mg/L	0.000000	0.14%

QC value within limits for V Recovery = Not calculated

Zn†	-19.7	-0.00038 mg/L	0.000076	-0.00038 mg/L	0.000076	19.94%

QC value within limits for Zn Recovery = Not calculated

All analyte(s) passed QC.

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

Autosampler Location: 5
Date Collected: 8/14/2007 01:13:40
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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	272272.8	106	%	1.1				1.09%
Yr	250348.6	96.0	%	1.54				1.60%
B_†	30223.7	1.14	mg/L	0.003	1.14	mg/L	0.003	0.25%
QC value within limits for B_ Recovery = 91.39%								
Ba†	189798.0	2.32	mg/L	0.004	2.32	mg/L	0.004	0.17%
QC value within limits for Ba Recovery = 92.87%								
Be†	2999641.2	0.915	mg/L	0.0021	0.915	mg/L	0.0021	0.23%
QC value within limits for Be Recovery = 91.48%								
Ca†	259461.2	26.3	mg/L	0.05	26.3	mg/L	0.05	0.19%
QC value within limits for Ca Recovery = 105.39%								
Cd†	28462.5	1.23	mg/L	0.010	1.23	mg/L	0.010	0.79%
QC value within limits for Cd Recovery = 98.16%								
Co†	55306.5	2.44	mg/L	0.002	2.44	mg/L	0.002	0.09%
QC value within limits for Co Recovery = 97.59%								
Cr†	163904.1	2.33	mg/L	0.001	2.33	mg/L	0.001	0.04%
QC value within limits for Cr Recovery = 93.39%								
Cu†	940524.1	2.20	mg/L	0.001	2.20	mg/L	0.001	0.05%
QC value less than the lower limit for Cu Recovery = 88.14%								
Fe†	4699.4	2.57	mg/L	0.043	2.57	mg/L	0.043	1.68%
QC value within limits for Fe Recovery = 102.89%								
K†	33201.1	25.1	mg/L	0.36	25.1	mg/L	0.36	1.45%
QC value within limits for K Recovery = 100.22%								
Mg†	111309.5	27.4	mg/L	0.01	27.4	mg/L	0.01	0.02%
QC value within limits for Mg Recovery = 109.59%								
Mo†	33287.2	2.23	mg/L	0.018	2.23	mg/L	0.018	0.81%
QC value less than the lower limit for Mo Recovery = 89.26%								
Na†	87852.5	26.1	mg/L	0.14	26.1	mg/L	0.14	0.52%
QC value within limits for Na Recovery = 104.42%								
Ni†	52913.8	2.43	mg/L	0.018	2.43	mg/L	0.018	0.76%
QC value within limits for Ni Recovery = 97.16%								
Pb†	12973.1	2.42	mg/L	0.013	2.42	mg/L	0.013	0.55%
QC value within limits for Pb Recovery = 96.99%								
Tl†	7486.8	2.52	mg/L	0.046	2.52	mg/L	0.046	1.82%
QC value within limits for Tl Recovery = 100.78%								
V†	373382.3	2.31	mg/L	0.003	2.31	mg/L	0.003	0.11%
QC value within limits for V Recovery = 92.45%								
Zn†	123943.1	2.43	mg/L	0.001	2.43	mg/L	0.001	0.05%
QC value within limits for Zn Recovery = 97.03%								
QC Failed. Retry.								

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

Autosampler Location: 5
Date Collected: 8/14/2007 01:15:15
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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	272812.7	106	%	0.1				0.08%
Yr	249760.1	95.8	%	0.20				0.20%
B_†	30454.1	1.15	mg/L	0.001	1.15	mg/L	0.001	0.12%
QC value within limits for B_ Recovery = 92.09%								
Ba†	188542.9	2.31	mg/L	0.001	2.31	mg/L	0.001	0.06%
QC value within limits for Ba Recovery = 92.26%								
Be†	2984509.8	0.910	mg/L	0.0018	0.910	mg/L	0.0018	0.20%
QC value within limits for Be Recovery = 91.01%								
Ca†	259218.7	26.3	mg/L	0.01	26.3	mg/L	0.01	0.05%
QC value within limits for Ca Recovery = 105.29%								
Cd†	28663.3	1.24	mg/L	0.006	1.24	mg/L	0.006	0.51%
QC value within limits for Cd Recovery = 98.85%								
Co†	55213.9	2.44	mg/L	0.008	2.44	mg/L	0.008	0.32%
QC value within limits for Co Recovery = 97.42%								
Cr†	163526.3	2.33	mg/L	0.003	2.33	mg/L	0.003	0.12%
QC value within limits for Cr Recovery = 93.17%								
Cu†	930581.8	2.18	mg/L	0.005	2.18	mg/L	0.005	0.23%
QC value less than the lower limit for Cu Recovery = 87.20%								
Fe†	4718.0	2.58	mg/L	0.016	2.58	mg/L	0.016	0.61%
QC value within limits for Fe Recovery = 103.30%								
K†	33129.2	25.0	mg/L	0.12	25.0	mg/L	0.12	0.47%
QC value within limits for K Recovery = 100.01%								
Mg†	110979.3	27.3	mg/L	0.02	27.3	mg/L	0.02	0.07%
QC value within limits for Mg Recovery = 109.27%								
Mo†	33488.6	2.24	mg/L	0.009	2.24	mg/L	0.009	0.38%
QC value less than the lower limit for Mo Recovery = 89.80%								
Na†	87017.3	25.9	mg/L	0.15	25.9	mg/L	0.15	0.58%
QC value within limits for Na Recovery = 103.43%								
Ni†	53079.0	2.44	mg/L	0.011	2.44	mg/L	0.011	0.47%
QC value within limits for Ni Recovery = 97.47%								
Pb†	12981.9	2.43	mg/L	0.014	2.43	mg/L	0.014	0.59%
QC value within limits for Pb Recovery = 97.05%								
Tl†	7526.7	2.53	mg/L	0.021	2.53	mg/L	0.021	0.82%
QC value within limits for Tl Recovery = 101.32%								
V†	372050.0	2.30	mg/L	0.005	2.30	mg/L	0.005	0.20%
QC value within limits for V Recovery = 92.13%								
Zn†	123795.5	2.42	mg/L	0.006	2.42	mg/L	0.006	0.25%
QC value within limits for Zn Recovery = 96.91%								

QC Failed. Continue with analysis.

Sequence No.: 102
Sample ID: 2708040004_5XMS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 96
Date Collected: 8/14/2007 01:18:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708040004_5XMS

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708040004_5XMS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	261267.0	101	%	0.2				0.17%
Yr	243208.2	93.3	%	2.63				2.82%
B_t	38165.7	1.45	mg/L	0.008	7.24	mg/L	0.038	0.53%
Bat	15303.0	0.191	mg/L	0.0007	0.936	mg/L	0.0036	0.38%
Bet	30185.2	0.00921	mg/L	0.000074	0.0460	mg/L	0.00037	0.81%
Cat	1193324.3	121	mg/L	0.5	606	mg/L	2.4	0.39%
Cdt	998.4	0.0435	mg/L	0.00017	0.217	mg/L	0.0008	0.39%
Cot	4398.7	0.194	mg/L	0.0010	0.970	mg/L	0.0048	0.49%
Crt	82313.8	1.17	mg/L	0.003	5.86	mg/L	0.014	0.24%
Cut	78685.5	0.184	mg/L	0.0021	0.922	mg/L	0.0104	1.13%
Fet	1896.6	1.04	mg/L	0.026	5.19	mg/L	0.132	2.55%
Kt	12300.4	9.28	mg/L	0.002	46.4	mg/L	0.01	0.03%
Mgt	233971.9	57.6	mg/L	0.05	288	mg/L	0.2	0.08%
Mot	2773.7	0.186	mg/L	0.0003	0.930	mg/L	0.0016	0.18%
Nat	797033.8	237	mg/L	0.3	1180	mg/L	1.6	0.14%
Nit	2011.5	0.0923	mg/L	0.00083	0.462	mg/L	0.0041	0.90%
Pbt	1019.7	0.191	mg/L	0.0002	0.953	mg/L	0.0009	0.09%
Tlt	621.6	0.209	mg/L	0.0000	1.05	mg/L	0.000	0.02%
Vt	30864.8	0.196	mg/L	0.0007	0.982	mg/L	0.0035	0.36%
Znt	10459.4	0.205	mg/L	0.0008	1.03	mg/L	0.004	0.41%

Sequence No.: 103
Sample ID: 2708040004_5XMSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 5X

Autosampler Location: 97
Date Collected: 8/14/2007 01:22:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708040004_5XMSD

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708040004_5XMSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	262444.7	102	%	3.5				3.40%
Yr	245026.0	94.0	%	3.78				4.02%
B_t	37872.7	1.44	mg/L	0.003	7.19	mg/L	0.017	0.23%
Bat	14770.1	0.181	mg/L	0.0061	0.903	mg/L	0.0305	3.37%
Bet	29585.2	0.00902	mg/L	0.000005	0.0451	mg/L	0.00002	0.05%
Cat	1170328.8	119	mg/L	0.1	594	mg/L	0.3	0.06%
Cdt	952.7	0.0415	mg/L	0.00125	0.207	mg/L	0.0062	3.01%
Cot	4231.3	0.187	mg/L	0.0059	0.933	mg/L	0.0293	3.14%
Crt	81371.1	1.16	mg/L	0.006	5.80	mg/L	0.032	0.55%
Cut	77428.4	0.181	mg/L	0.0005	0.907	mg/L	0.0027	0.30%
Fet	1825.9	0.999	mg/L	0.0432	5.00	mg/L	0.216	4.33%
Kt	12009.0	9.06	mg/L	0.028	45.3	mg/L	0.14	0.31%
Mgt	230197.2	56.7	mg/L	0.16	283	mg/L	0.8	0.28%
Mot	2665.5	0.179	mg/L	0.0052	0.893	mg/L	0.0262	2.94%
Nat	778657.2	231	mg/L	0.4	1160	mg/L	1.9	0.16%
Nit	1942.9	0.0892	mg/L	0.00338	0.446	mg/L	0.0169	3.79%
Pbt	980.0	0.183	mg/L	0.0052	0.916	mg/L	0.0261	2.85%
Tlt	601.7	0.203	mg/L	0.0068	1.01	mg/L	0.034	3.34%
Vt	30355.8	0.193	mg/L	0.0010	0.966	mg/L	0.0048	0.50%
Znt	10090.9	0.198	mg/L	0.0061	0.991	mg/L	0.0305	3.08%

Sequence No.: 107
Sample ID: 2708030228_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 101
Date Collected: 8/14/2007 01:40:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030228_2X

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: 2708030228_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	261419.7	101	%	2.9				2.85%
Yr	239522.2	91.9	%	0.61				0.66%
B_t	36346.7	1.38	mg/L	0.011	2.76	mg/L	0.021	0.77%
Bat	1360.6	0.0166	mg/L	0.00013	0.0333	mg/L	0.00026	0.77%
Bet	-780.6	-0.00024	mg/L	0.000013	-0.00048	mg/L	0.000027	5.65%
Cat	711301.4	72.2	mg/L	0.39	144	mg/L	0.8	0.54%
Cdt	28.4	0.00121	mg/L	0.000027	0.00243	mg/L	0.000055	2.25%
Cot	-3.9	-0.00017	mg/L	0.000028	-0.00035	mg/L	0.000056	15.95%
Crt	46890.6	0.668	mg/L	0.0008	1.34	mg/L	0.002	0.12%
Cut	233.9	0.00055	mg/L	0.000195	0.00109	mg/L	0.000389	35.56%
Fet	102.5	0.0561	mg/L	0.00119	0.112	mg/L	0.0024	2.13%
Kt	6497.8	4.90	mg/L	0.208	9.81	mg/L	0.416	4.24%
Mgt	172674.5	42.5	mg/L	0.34	85.0	mg/L	0.68	0.80%
Mot	113.2	0.00759	mg/L	0.000259	0.0152	mg/L	0.00052	3.41%
Nat	701353.6	208	mg/L	2.1	417	mg/L	4.1	0.99%
Nit	-2.6	-0.00012	mg/L	0.000112	-0.00024	mg/L	0.000223	92.75%
Pbt	-6.5	-0.00121	mg/L	0.001040	-0.00242	mg/L	0.002079	85.91%
Tlt	25.0	0.00848	mg/L	0.002124	0.0170	mg/L	0.00425	25.04%
Vt	6262.4	0.0422	mg/L	0.00028	0.0845	mg/L	0.00057	0.67%
Znt	251.6	0.00496	mg/L	0.000386	0.00992	mg/L	0.000773	7.79%

Sequence No.: 108
Sample ID: 2708030229_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 102
Date Collected: 8/14/2007 01:44:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030229_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030229_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	265147.4	103	%	0.9				0.87%
Yr	235055.8	90.2	%	0.58				0.65%
B_t	25761.3	0.978	mg/L	0.0056	1.96	mg/L	0.011	0.58%
Bat	560.5	0.00686	mg/L	0.000088	0.0137	mg/L	0.00018	1.29%
Bet	-777.3	-0.00024	mg/L	0.000034	-0.00047	mg/L	0.000068	14.39%
Cat	1551146.6	158	mg/L	0.4	315	mg/L	0.7	0.23%
Cdt	22.2	0.00095	mg/L	0.000050	0.00189	mg/L	0.000101	5.32%
Cot	-5.6	-0.00025	mg/L	0.000093	-0.00050	mg/L	0.000187	37.50%
Crt	16462.2	0.234	mg/L	0.0006	0.469	mg/L	0.0012	0.25%
Cut	705.6	0.00165	mg/L	0.000020	0.00330	mg/L	0.000039	1.18%
Fet	72.8	0.0398	mg/L	0.00126	0.0796	mg/L	0.00251	3.15%
Kt	6046.0	4.56	mg/L	0.022	9.13	mg/L	0.045	0.49%
Mgt	187015.5	46.0	mg/L	0.13	92.1	mg/L	0.27	0.29%
Mot	77.1	0.00517	mg/L	0.000177	0.0103	mg/L	0.00035	3.42%
Nat	902240.5	268	mg/L	0.0	536	mg/L	0.1	0.01%
Nit	-13.1	-0.00060	mg/L	0.000067	-0.00120	mg/L	0.000135	11.23%
Pbt	-16.5	-0.00309	mg/L	0.001417	-0.00619	mg/L	0.002835	45.83%
Tlt	42.9	0.0146	mg/L	0.00024	0.0291	mg/L	0.00048	1.65%
Vt	7957.1	0.0503	mg/L	0.00014	0.101	mg/L	0.0003	0.28%
Znt	426.4	0.00841	mg/L	0.000083	0.0168	mg/L	0.00017	0.99%

Sequence No.: 109
Sample ID: 2708030230_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 103
Date Collected: 8/14/2007 01:49:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030230_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030230_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	256035.1	99.3	%	2.34				2.35%
Yr	235878.0	90.5	%	0.86				0.95%
B_t	32341.3	1.23	mg/L	0.005	2.46	mg/L	0.009	0.37%
Bat	1296.9	0.0159	mg/L	0.00067	0.0317	mg/L	0.00133	4.21%
Bet	-1202.2	-0.00037	mg/L	0.000005	-0.00073	mg/L	0.000009	1.24%
Cat	1885034.1	191	mg/L	5.6	383	mg/L	11.1	2.91%
Cdt	-10.2	-0.00044	mg/L	0.000212	-0.00088	mg/L	0.000424	48.42%
Cot	-11.2	-0.00049	mg/L	0.000241	-0.00099	mg/L	0.000483	48.88%
Crt	61760.3	0.880	mg/L	0.0011	1.76	mg/L	0.002	0.13%
Cut	219.7	0.00051	mg/L	0.000128	0.00103	mg/L	0.000256	24.89%
Fet	28.7	0.0157	mg/L	0.00049	0.0315	mg/L	0.00098	3.12%
Kt	9770.4	7.37	mg/L	0.165	14.7	mg/L	0.33	2.24%
Mgt	319769.2	78.7	mg/L	0.40	157	mg/L	0.8	0.51%
Mot	96.4	0.00646	mg/L	0.000233	0.0129	mg/L	0.00047	3.60%
Nat	876828.4	261	mg/L	7.2	521	mg/L	14.4	2.76%
Nit	-18.3	-0.00084	mg/L	0.000134	-0.00168	mg/L	0.000267	15.86%
Pbt	-27.9	-0.00522	mg/L	0.000289	-0.0104	mg/L	0.00058	5.53%
Tlt	43.8	0.0147	mg/L	0.00015	0.0295	mg/L	0.00029	1.00%
Vt	3482.4	0.0263	mg/L	0.00008	0.0526	mg/L	0.00016	0.31%
Znt	305.5	0.00602	mg/L	0.000351	0.0120	mg/L	0.00070	5.82%

Sequence No.: 110
Sample ID: 2708030231_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 104
Date Collected: 8/14/2007 01:53:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030231_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030231_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	268186.2	104	%	4.1				3.93%
Yr	238059.8	91.3	%	0.20				0.21%
B_t	9175.5	0.348	mg/L	0.0004	0.697	mg/L	0.0009	0.13%
Bat	709.7	0.00868	mg/L	0.000374	0.0174	mg/L	0.00075	4.31%
Bet	-325.7	-0.00010	mg/L	0.000034	-0.00020	mg/L	0.000068	34.47%
Cat	527473.6	53.6	mg/L	0.09	107	mg/L	0.2	0.16%
Cdt	-3.1	-0.00013	mg/L	0.000130	-0.00027	mg/L	0.000260	97.13%
Cot	-9.8	-0.00043	mg/L	0.000093	-0.00086	mg/L	0.000186	21.55%
Crt	2799.1	0.0399	mg/L	0.00241	0.0797	mg/L	0.00482	6.05%
Cut	89.7	0.00021	mg/L	0.000280	0.00042	mg/L	0.000560	133.64%
Fet	23.8	0.0130	mg/L	0.00033	0.0261	mg/L	0.00065	2.50%
Kt	3204.8	2.42	mg/L	0.071	4.84	mg/L	0.142	2.93%
Mgt	61059.1	15.0	mg/L	0.02	30.1	mg/L	0.04	0.12%
Mot	77.0	0.00516	mg/L	0.000000	0.0103	mg/L	0.00000	0.01%
Nat	267008.1	79.3	mg/L	0.05	159	mg/L	0.1	0.06%
Nit	-15.4	-0.00071	mg/L	0.000318	-0.00142	mg/L	0.000637	44.94%
Pbt	-5.2	-0.00097	mg/L	0.001192	-0.00193	mg/L	0.002384	123.51%
Tlt	33.7	0.0114	mg/L	0.00046	0.0228	mg/L	0.00091	4.02%
Vt	4661.2	0.0289	mg/L	0.00018	0.0578	mg/L	0.00036	0.63%
Znt	154.5	0.00305	mg/L	0.000411	0.00610	mg/L	0.000822	13.47%

Sequence No.: 111
Sample ID: 2708030232_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 105
Date Collected: 8/14/2007 01:57:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030232_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030232_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	266884.3	103	%	3.6				3.43%
Yr	247910.9	95.1	%	0.73				0.77%
B_t	40414.9	1.53	mg/L	0.006	3.07	mg/L	0.013	0.41%
Bat	820.7	0.0100	mg/L	0.00036	0.0201	mg/L	0.00073	3.62%
Bet	-345.5	-0.00011	mg/L	0.000012	-0.00021	mg/L	0.000024	11.23%
Cat	604242.6	61.4	mg/L	0.01	123	mg/L	0.0	0.02%
Cdt	10.7	0.00046	mg/L	0.000300	0.00093	mg/L	0.000599	64.66%
Cot	21.8	0.00096	mg/L	0.000144	0.00192	mg/L	0.000288	15.01%
Crt	6787.9	0.096	mg/L	0.00257	0.193	mg/L	0.0051	2.65%
Cut	103.7	0.00024	mg/L	0.000229	0.00049	mg/L	0.000458	93.97%
Fet	81.5	0.0446	mg/L	0.00046	0.0892	mg/L	0.00093	1.04%
Kt	4274.4	3.23	mg/L	0.062	6.45	mg/L	0.125	1.94%
Mgt	111492.4	27.4	mg/L	0.61	54.9	mg/L	1.21	2.21%
Mot	79.6	0.00533	mg/L	0.000420	0.0107	mg/L	0.00084	7.87%
Nat	487330.1	145	mg/L	0.5	290	mg/L	0.9	0.31%
Nit	-3.0	-0.00014	mg/L	0.000426	-0.00028	mg/L	0.000852	307.93%
Pbt	-6.0	-0.00113	mg/L	0.000588	-0.00225	mg/L	0.001175	52.13%
Tlt	25.0	0.00864	mg/L	0.000293	0.0173	mg/L	0.00059	3.39%
Vt	14651.4	0.0907	mg/L	0.00022	0.181	mg/L	0.0004	0.24%
Znt	208.3	0.00411	mg/L	0.000190	0.00821	mg/L	0.000380	4.63%

Sequence No.: 112
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/14/2007 02:02:25
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	263049.2	102	%	0.0				0.01%
Yr	246791.2	94.7		2.99				3.16%
B_†	61164.0	2.31	mg/L	0.001	2.31	mg/L	0.001	0.06%
QC value within limits for B_ Recovery = 92.48%								
Ba†	374905.9	4.59	mg/L	0.015	4.59	mg/L	0.015	0.33%
QC value within limits for Ba Recovery = 91.73%								
Be†	5927792.5	1.81	mg/L	0.008	1.81	mg/L	0.008	0.42%
QC value within limits for Be Recovery = 90.39%								
Ca†	517942.3	52.6	mg/L	0.17	52.6	mg/L	0.17	0.31%
QC value within limits for Ca Recovery = 105.19%								
Cd†	57144.3	2.46	mg/L	0.059	2.46	mg/L	0.059	2.40%
QC value within limits for Cd Recovery = 98.53%								
Co†	110336.5	4.87	mg/L	0.122	4.87	mg/L	0.122	2.52%
QC value within limits for Co Recovery = 97.34%								
Cr†	329078.7	4.69	mg/L	0.003	4.69	mg/L	0.003	0.06%
QC value within limits for Cr Recovery = 93.75%								
Cu†	1892617.9	4.43	mg/L	0.003	4.43	mg/L	0.003	0.06%
QC value less than the lower limit for Cu Recovery = 88.68%								
Fe†	9383.4	5.14	mg/L	0.045	5.14	mg/L	0.045	0.88%
QC value within limits for Fe Recovery = 102.72%								
K†	66390.8	50.1	mg/L	0.58	50.1	mg/L	0.58	1.15%
QC value within limits for K Recovery = 100.21%								
Mg†	221435.4	54.5	mg/L	0.06	54.5	mg/L	0.06	0.10%
QC value within limits for Mg Recovery = 109.01%								
Mo†	66948.0	4.49	mg/L	0.111	4.49	mg/L	0.111	2.47%
QC value less than the lower limit for Mo Recovery = 89.76%								
Na†	175376.4	52.1	mg/L	0.36	52.1	mg/L	0.36	0.69%
QC value within limits for Na Recovery = 104.23%								
Ni†	103844.6	4.77	mg/L	0.123	4.77	mg/L	0.123	2.58%
QC value within limits for Ni Recovery = 95.34%								
Pb†	25427.7	4.75	mg/L	0.108	4.75	mg/L	0.108	2.26%
QC value within limits for Pb Recovery = 95.05%								
Tl†	14661.8	4.93	mg/L	0.116	4.93	mg/L	0.116	2.35%
QC value within limits for Tl Recovery = 98.69%								
V†	752044.1	4.66	mg/L	0.006	4.66	mg/L	0.006	0.12%
QC value within limits for V Recovery = 93.11%								
Zn†	246624.8	4.83	mg/L	0.006	4.83	mg/L	0.006	0.12%
QC value within limits for Zn Recovery = 96.54%								

QC Failed. Retry.

Sequence No.: 113
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/14/2007 02:04:02
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	269958.4	105	%	0.3				0.29%
Yr	245514.6	94.2	%	2.21				2.34%
B_†	61728.4	2.33	mg/L	0.006	2.33	mg/L	0.006	0.27%
QC value within limits for B_	Recovery = 93.33%							
Ba†	375624.1	4.60	mg/L	0.016	4.60	mg/L	0.016	0.34%
QC value within limits for Ba	Recovery = 91.90%							
Be†	6005145.5	1.83	mg/L	0.000	1.83	mg/L	0.000	0.02%
QC value within limits for Be	Recovery = 91.56%							
Ca†	512864.2	52.1	mg/L	0.01	52.1	mg/L	0.01	0.02%
QC value within limits for Ca	Recovery = 104.16%							
Cd†	57375.8	2.47	mg/L	0.011	2.47	mg/L	0.011	0.45%
QC value within limits for Cd	Recovery = 98.93%							
Co†	110129.2	4.86	mg/L	0.012	4.86	mg/L	0.012	0.25%
QC value within limits for Co	Recovery = 97.16%							
Cr†	328962.8	4.69	mg/L	0.008	4.69	mg/L	0.008	0.17%
QC value within limits for Cr	Recovery = 93.72%							
Cu†	1895824.5	4.44	mg/L	0.009	4.44	mg/L	0.009	0.19%
QC value less than the lower limit for Cu	Recovery = 88.83%							
Fe†	9527.2	5.21	mg/L	0.051	5.21	mg/L	0.051	0.98%
QC value within limits for Fe	Recovery = 104.30%							
K†	68533.8	51.7	mg/L	0.80	51.7	mg/L	0.80	1.54%
QC value within limits for K	Recovery = 103.44%							
Mg†	219052.1	53.9	mg/L	0.08	53.9	mg/L	0.08	0.15%
QC value within limits for Mg	Recovery = 107.84%							
Mo†	67206.0	4.51	mg/L	0.036	4.51	mg/L	0.036	0.80%
QC value within limits for Mo	Recovery = 90.11%							
Na†	174194.3	51.8	mg/L	0.14	51.8	mg/L	0.14	0.27%
QC value within limits for Na	Recovery = 103.52%							
Ni†	103863.9	4.77	mg/L	0.046	4.77	mg/L	0.046	0.97%
QC value within limits for Ni	Recovery = 95.36%							
Pb†	25518.8	4.77	mg/L	0.029	4.77	mg/L	0.029	0.62%
QC value within limits for Pb	Recovery = 95.39%							
Tl†	14721.8	4.95	mg/L	0.029	4.95	mg/L	0.029	0.59%
QC value within limits for Tl	Recovery = 99.09%							
V†	751153.1	4.65	mg/L	0.006	4.65	mg/L	0.006	0.13%
QC value within limits for V	Recovery = 93.00%							
Zn†	247228.2	4.84	mg/L	0.020	4.84	mg/L	0.020	0.42%
QC value within limits for Zn	Recovery = 96.78%							
QC Failed. Retry.								

Sequence No.: 114
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/14/2007 02:05:33
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	265607.4	103	%	1.3				1.23%
Yr	247087.4	94.8	%	1.95				2.05%
B_†	62412.7	2.36	mg/L	0.013	2.36	mg/L	0.013	0.53%
QC value within limits for B_	Recovery = 94.37%							
Ba†	377848.3	4.62	mg/L	0.026	4.62	mg/L	0.026	0.56%
QC value within limits for Ba	Recovery = 92.45%							
Be†	6055320.7	1.85	mg/L	0.032	1.85	mg/L	0.032	1.71%
QC value within limits for Be	Recovery = 92.33%							
Ca†	516472.7	52.4	mg/L	0.01	52.4	mg/L	0.01	0.02%
QC value within limits for Ca	Recovery = 104.89%							
Cd†	58499.1	2.52	mg/L	0.016	2.52	mg/L	0.016	0.62%
QC value within limits for Cd	Recovery = 100.85%							
Co†	110239.0	4.86	mg/L	0.027	4.86	mg/L	0.027	0.56%

QC value within limits for Co Recovery = 97.26%

Crt	331367.5	4.72 mg/L	0.019	4.72 mg/L	0.019	0.41%

QC value within limits for Cr Recovery = 94.40%

Cut	1904862.0	4.46 mg/L	0.042	4.46 mg/L	0.042	0.95%

QC value less than the lower limit for Cu Recovery = 89.25%

Fet	9511.6	5.21 mg/L	0.062	5.21 mg/L	0.062	1.18%

QC value within limits for Fe Recovery = 104.13%

Kt	67924.6	51.3 mg/L	0.43	51.3 mg/L	0.43	0.84%

QC value within limits for K Recovery = 102.52%

Mgt	220866.1	54.4 mg/L	0.02	54.4 mg/L	0.02	0.05%

QC value within limits for Mg Recovery = 108.73%

Mot	68403.3	4.59 mg/L	0.008	4.59 mg/L	0.008	0.18%

QC value within limits for Mo Recovery = 91.71%

Nat	175591.2	52.2 mg/L	0.17	52.2 mg/L	0.17	0.33%

QC value within limits for Na Recovery = 104.35%

Nit	106214.4	4.88 mg/L	0.026	4.88 mg/L	0.026	0.54%

QC value within limits for Ni Recovery = 97.52%

Pbt	26010.7	4.86 mg/L	0.010	4.86 mg/L	0.010	0.21%

QC value within limits for Pb Recovery = 97.23%

Tlt	14953.6	5.03 mg/L	0.005	5.03 mg/L	0.005	0.09%

QC value within limits for Tl Recovery = 100.65%

Vt	757148.9	4.69 mg/L	0.018	4.69 mg/L	0.018	0.39%

QC value within limits for V Recovery = 93.74%

Znt	249027.2	4.87 mg/L	0.023	4.87 mg/L	0.023	0.47%

QC value within limits for Zn Recovery = 97.47%

QC Failed. Continue with analysis.

Sequence No.: 115
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 8/14/2007 02:08:44
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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	274473.7	106	%	1.3				1.23%
Yr	252109.0	96.7	%	2.95				3.05%
B_†	741.2	0.0281	mg/L	0.00204	0.0281	mg/L	0.00204	7.26%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	-11.5	-0.00014	mg/L	0.000006	-0.00014	mg/L	0.000006	4.34%
QC value within limits for Ba Recovery = Not calculated								
Be†	-57.2	-0.00002	mg/L	0.000012	-0.00002	mg/L	0.000012	67.19%
QC value within limits for Be Recovery = Not calculated								
Ca†	45.0	0.00457	mg/L	0.003161	0.00457	mg/L	0.003161	69.15%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-0.3	-0.00001	mg/L	0.000143	-0.00001	mg/L	0.000143	>999.9%
QC value within limits for Cd Recovery = Not calculated								
Co†	-4.9	-0.00022	mg/L	0.000184	-0.00022	mg/L	0.000184	84.16%
QC value within limits for Co Recovery = Not calculated								
Cr†	31.1	0.00044	mg/L	0.000107	0.00044	mg/L	0.000107	24.11%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-119.8	-0.00028	mg/L	0.000042	-0.00028	mg/L	0.000042	15.04%
QC value within limits for Cu Recovery = Not calculated								
Fe†	1.6	0.00085	mg/L	0.000717	0.00085	mg/L	0.000717	84.27%
QC value within limits for Fe Recovery = Not calculated								
K†	-21.9	-0.0166	mg/L	0.01569	-0.0166	mg/L	0.01569	94.79%
QC value within limits for K Recovery = Not calculated								
Mg†	3.2	0.00078	mg/L	0.000248	0.00078	mg/L	0.000248	31.67%
QC value within limits for Mg Recovery = Not calculated								
Mo†	28.2	0.00189	mg/L	0.000233	0.00189	mg/L	0.000233	12.32%
QC value within limits for Mo Recovery = Not calculated								
Na†	508.0	0.151	mg/L	0.0038	0.151	mg/L	0.0038	2.49%
QC value within limits for Na Recovery = Not calculated								
Ni†	-7.6	-0.00035	mg/L	0.000106	-0.00035	mg/L	0.000106	30.36%
QC value within limits for Ni Recovery = Not calculated								
Pb†	17.9	0.00334	mg/L	0.000454	0.00334	mg/L	0.000454	13.61%
QC value within limits for Pb Recovery = Not calculated								
Tl†	5.1	0.00172	mg/L	0.001613	0.00172	mg/L	0.001613	93.77%
QC value within limits for Tl Recovery = Not calculated								
V†	-13.7	-0.00008	mg/L	0.000434	-0.00008	mg/L	0.000434	530.91%
QC value within limits for V Recovery = Not calculated								
Zn†	6.0	0.00012	mg/L	0.000095	0.00012	mg/L	0.000095	78.02%
QC value within limits for Zn Recovery = Not calculated								

QC Failed. Retry.

Sequence No.: 116
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 8/14/2007 02:11:22
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.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	278656.3	108	%	3.0				2.82%
Yr	250945.4	96.3	%	3.40				3.53%
B_t	485.3	0.0184	mg/L	0.00032	0.0184	mg/L	0.00032	1.72%
QC value within limits for B_		Recovery = Not calculated						
Bat	-9.8	-0.00012	mg/L	0.000041	-0.00012	mg/L	0.000041	34.32%
QC value within limits for Ba		Recovery = Not calculated						
Bet	-1.5	0.00000	mg/L	0.000006	0.00000	mg/L	0.000006	>999.9%
QC value within limits for Be		Recovery = Not calculated						
Cat	63.3	0.00643	mg/L	0.002976	0.00643	mg/L	0.002976	46.32%
QC value within limits for Ca		Recovery = Not calculated						
Cdt	-1.5	-0.00006	mg/L	0.000114	-0.00006	mg/L	0.000114	177.48%
QC value within limits for Cd		Recovery = Not calculated						
Cot	-9.7	-0.00043	mg/L	0.000202	-0.00043	mg/L	0.000202	47.15%
QC value within limits for Co		Recovery = Not calculated						
Crt	22.3	0.00032	mg/L	0.000061	0.00032	mg/L	0.000061	19.38%
QC value within limits for Cr		Recovery = Not calculated						
Cut	-235.6	-0.00055	mg/L	0.000180	-0.00055	mg/L	0.000180	32.66%
QC value within limits for Cu		Recovery = Not calculated						
Fet	-3.2	-0.00173	mg/L	0.000873	-0.00173	mg/L	0.000873	50.41%
QC value within limits for Fe		Recovery = Not calculated						
Kt	-12.5	-0.00947	mg/L	0.055537	-0.00947	mg/L	0.055537	586.56%
QC value within limits for K		Recovery = Not calculated						
Mgt	2.7	0.00066	mg/L	0.000454	0.00066	mg/L	0.000454	68.37%
QC value within limits for Mg		Recovery = Not calculated						
Mot	5.6	0.00037	mg/L	0.000055	0.00037	mg/L	0.000055	14.79%
QC value within limits for Mo		Recovery = Not calculated						
Nat	426.6	0.127	mg/L	0.0131	0.127	mg/L	0.0131	10.33%
QC value within limits for Na		Recovery = Not calculated						
Nit	-10.1	-0.00047	mg/L	0.000464	-0.00047	mg/L	0.000464	99.70%
QC value within limits for Ni		Recovery = Not calculated						
Pbt	16.0	0.00300	mg/L	0.000332	0.00300	mg/L	0.000332	11.08%
QC value within limits for Pb		Recovery = Not calculated						
Tlt	8.1	0.00272	mg/L	0.000183	0.00272	mg/L	0.000183	6.72%
QC value within limits for Tl		Recovery = Not calculated						
Vt	-17.0	-0.00010	mg/L	0.000129	-0.00010	mg/L	0.000129	125.40%
QC value within limits for V		Recovery = Not calculated						
Znt	-6.3	-0.00012	mg/L	0.000091	-0.00012	mg/L	0.000091	75.68%
QC value within limits for Zn		Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 117
Sample ID: 2708030233_20X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 20X

Autosampler Location: 106
Date Collected: 8/14/2007 02:14:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030233_20X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030233_20X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	268428.1	104		1.3				1.22%
Yr	241074.4	92.5	%	2.54				2.74%
B_t	4962.6	0.188	mg/L	0.0010	3.77	mg/L	0.020	0.53%
Bat	165.5	0.00202	mg/L	0.000007	0.0405	mg/L	0.00014	0.34%
Bet	-973.2	-0.00030	mg/L	0.000015	-0.00594	mg/L	0.000302	5.09%
Cat	483351.6	49.1	mg/L	0.13	982	mg/L	2.6	0.26%
Cdt	-16.3	-0.00070	mg/L	0.000089	-0.0139	mg/L	0.00179	12.82%
Cot	7.7	0.00034	mg/L	0.000145	0.00682	mg/L	0.002906	42.59%
Crt	115442.9	1.64	mg/L	0.003	32.9	mg/L	0.05	0.16%
Cut	-7.2	-0.00002	mg/L	0.000186	-0.00033	mg/L	0.003721	>999.9%
Fet	20.7	0.0114	mg/L	0.00063	0.227	mg/L	0.0125	5.51%
Kt	2456.8	1.85	mg/L	0.089	37.1	mg/L	1.78	4.81%
Mgt	104675.1	25.8	mg/L	0.50	515	mg/L	10.0	1.95%
Mot	30.1	0.00202	mg/L	0.000294	0.0404	mg/L	0.00589	14.59%
Nat	449131.1	133	mg/L	0.6	2670	mg/L	11.1	0.41%
Nit	-10.6	-0.00049	mg/L	0.000090	-0.00973	mg/L	0.001798	18.48%
Pbt	-7.9	-0.00148	mg/L	0.000153	-0.0297	mg/L	0.00307	10.34%
Tlt	16.3	0.00547	mg/L	0.000242	0.109	mg/L	0.0048	4.43%
Vt	-895.1	0.00356	mg/L	0.000012	0.0713	mg/L	0.00024	0.33%
Znt	209.2	0.00413	mg/L	0.000108	0.0825	mg/L	0.00215	2.61%

Sequence No.: 118
Sample ID: 2708030234_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 107
Date Collected: 8/14/2007 02:19:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030234_2X

Analyte	Back Pressure	Flow
All	218.0 kPa	0.65 L/min

Mean Data: 2708030234_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	263065.3	102	%	1.5				1.50%
Yr	234794.4	90.1	%	1.11				1.23%
B_t	125519.6	4.76	mg/L	0.003	9.53	mg/L	0.007	0.07%
Bat	433.7	0.00531	mg/L	0.000153	0.0106	mg/L	0.00031	2.89%
Bet	-1145.6	-0.00035	mg/L	0.000036	-0.00070	mg/L	0.000072	10.31%
Cat	260381.6	26.4	mg/L	0.00	52.9	mg/L	0.01	0.02%
Cdt	92.9	0.00397	mg/L	0.000056	0.00795	mg/L	0.000113	1.42%
Cot	6.1	0.00027	mg/L	0.000126	0.00054	mg/L	0.000251	46.47%
Crt	91107.3	1.30	mg/L	0.002	2.60	mg/L	0.005	0.18%
Cut	145.3	0.00034	mg/L	0.000041	0.00068	mg/L	0.000083	12.15%
Fet	732.7	0.401	mg/L	0.0036	0.802	mg/L	0.0072	0.90%
Kt	14014.5	10.6	mg/L	0.03	21.2	mg/L	0.05	0.25%
Mgt	87991.7	21.7	mg/L	0.06	43.3	mg/L	0.13	0.29%
Mot	177.6	0.0119	mg/L	0.00033	0.0238	mg/L	0.00065	2.73%
Nat	1659998.4	493	mg/L	1.1	987	mg/L	2.1	0.22%
Nit	-8.0	-0.00037	mg/L	0.000173	-0.00073	mg/L	0.000347	47.36%
Pbt	-2.4	-0.00046	mg/L	0.000560	-0.00091	mg/L	0.001119	122.56%
Tlt	13.1	0.00454	mg/L	0.001573	0.00908	mg/L	0.003147	34.64%
Vt	8324.3	0.0584	mg/L	0.00059	0.117	mg/L	0.0012	1.00%
Znt	265.3	0.00523	mg/L	0.000131	0.0105	mg/L	0.00026	2.50%

Sequence No.: 119
Sample ID: 2708030235_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 108
Date Collected: 8/14/2007 02:23:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2708030235_2X

Analyte	Back Pressure	Flow
All	219.0 kPa	0.65 L/min

Mean Data: 2708030235_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	262852.8	102	%	3.4				3.32%
Yr	248521.2	95.3	%	1.08				1.13%
B_t	39447.1	1.50	mg/L	0.003	2.99	mg/L	0.006	0.22%
Bat	680.0	0.00832	mg/L	0.000300	0.0166	mg/L	0.00060	3.61%
Bet	-851.0	-0.00026	mg/L	0.000001	-0.00052	mg/L	0.000002	0.33%
Cat	1124254.4	114	mg/L	0.2	228	mg/L	0.4	0.19%
Cdt	18.6	0.00079	mg/L	0.000208	0.00159	mg/L	0.000417	26.23%
Cot	-10.7	-0.00047	mg/L	0.000222	-0.00095	mg/L	0.000444	46.94%
Crt	33905.1	0.483	mg/L	0.0031	0.966	mg/L	0.0063	0.65%
Cut	4.1	0.00001	mg/L	0.000010	0.00002	mg/L	0.000019	103.65%
Fet	4442.6	2.43	mg/L	0.096	4.86	mg/L	0.192	3.96%
Kt	9677.5	7.30	mg/L	0.200	14.6	mg/L	0.40	2.73%
Mgt	261080.5	64.3	mg/L	0.07	129	mg/L	0.1	0.10%
Mot	128.8	0.00863	mg/L	0.000073	0.0173	mg/L	0.00015	0.84%
Nat	1023623.6	304	mg/L	1.0	608	mg/L	2.0	0.33%
Nit	-20.3	-0.00093	mg/L	0.000227	-0.00186	mg/L	0.000453	24.33%
Pbt	-17.5	-0.00327	mg/L	0.001328	-0.00654	mg/L	0.002655	40.60%
Tlt	36.1	0.0122	mg/L	0.00005	0.0243	mg/L	0.00010	0.40%
Vt	2264.1	0.0166	mg/L	0.00069	0.0332	mg/L	0.00138	4.15%
Znt	240.0	0.00473	mg/L	0.000275	0.00947	mg/L	0.000549	5.80%

Sequence No.: 127
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/14/2007 02:58:25
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	270921.5	105	%	1.2				1.10%
Yr	243447.2	93.4	%	1.36				1.46%
B_†	61956.7	2.34	mg/L	0.005	2.34	mg/L	0.005	0.20%
QC value within limits for B_ Recovery = 93.68%								
Bat	377621.1	4.62	mg/L	0.013	4.62	mg/L	0.013	0.27%
QC value within limits for Ba Recovery = 92.39%								
Be†	5925307.8	1.81	mg/L	0.017	1.81	mg/L	0.017	0.92%
QC value within limits for Be Recovery = 90.35%								
Ca†	522300.2	53.0	mg/L	0.27	53.0	mg/L	0.27	0.50%
QC value within limits for Ca Recovery = 106.07%								
Cd†	58220.5	2.51	mg/L	0.022	2.51	mg/L	0.022	0.89%
QC value within limits for Cd Recovery = 100.38%								
Co†	111367.6	4.91	mg/L	0.018	4.91	mg/L	0.018	0.36%
QC value within limits for Co Recovery = 98.25%								
Cr†	333068.1	4.74	mg/L	0.003	4.74	mg/L	0.003	0.06%
QC value within limits for Cr Recovery = 94.89%								
Cu†	1900969.4	4.45	mg/L	0.005	4.45	mg/L	0.005	0.10%
QC value less than the lower limit for Cu Recovery = 89.07%								
Fe†	9659.2	5.29	mg/L	0.002	5.29	mg/L	0.002	0.04%
QC value within limits for Fe Recovery = 105.74%								
K†	69289.4	52.3	mg/L	0.41	52.3	mg/L	0.41	0.79%
QC value within limits for K Recovery = 104.58%								
Mg†	223392.1	55.0	mg/L	0.36	55.0	mg/L	0.36	0.66%
QC value within limits for Mg Recovery = 109.98%								
Mo†	67859.7	4.55	mg/L	0.039	4.55	mg/L	0.039	0.85%
QC value within limits for Mo Recovery = 90.98%								
Na†	177575.2	52.8	mg/L	0.21	52.8	mg/L	0.21	0.39%
QC value within limits for Na Recovery = 105.53%								
Ni†	105975.2	4.86	mg/L	0.041	4.86	mg/L	0.041	0.83%
QC value within limits for Ni Recovery = 97.30%								
Pb†	25915.3	4.84	mg/L	0.030	4.84	mg/L	0.030	0.63%
QC value within limits for Pb Recovery = 96.87%								
Tl†	14851.1	5.00	mg/L	0.037	5.00	mg/L	0.037	0.74%
QC value within limits for Tl Recovery = 99.96%								
V†	759023.0	4.70	mg/L	0.001	4.70	mg/L	0.001	0.01%
QC value within limits for V Recovery = 93.97%								
Zn†	249034.2	4.87	mg/L	0.013	4.87	mg/L	0.013	0.26%
QC value within limits for Zn Recovery = 97.48%								

QC Failed. Retry.

Sequence No.: 128
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/14/2007 03:00:02
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	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	268401.7	104	%	0.5				0.48%
Yr	245916.2	94.3	%	0.59				0.63%
B_†	62867.5	2.38	mg/L	0.004	2.38	mg/L	0.004	0.18%
QC value within limits for B_ Recovery = 95.06%								
Ba†	378404.5	4.63	mg/L	0.012	4.63	mg/L	0.012	0.25%
QC value within limits for Ba Recovery = 92.58%								
Be†	6020037.9	1.84	mg/L	0.020	1.84	mg/L	0.020	1.11%
QC value within limits for Be Recovery = 91.79%								
Ca†	524683.3	53.3	mg/L	0.01	53.3	mg/L	0.01	0.02%
QC value within limits for Ca Recovery = 106.56%								
Cd†	58537.9	2.52	mg/L	0.017	2.52	mg/L	0.017	0.66%
QC value within limits for Cd Recovery = 100.93%								
Co†	111660.4	4.93	mg/L	0.011	4.93	mg/L	0.011	0.23%
QC value within limits for Co Recovery = 98.51%								
Cr†	333791.4	4.75	mg/L	0.000	4.75	mg/L	0.000	0.01%
QC value within limits for Cr Recovery = 95.09%								
Cu†	1911141.0	4.48	mg/L	0.011	4.48	mg/L	0.011	0.25%
QC value less than the lower limit for Cu Recovery = 89.55%								
Fe†	9556.9	5.23	mg/L	0.019	5.23	mg/L	0.019	0.37%
QC value within limits for Fe Recovery = 104.62%								
K†	68528.3	51.7	mg/L	0.05	51.7	mg/L	0.05	0.09%
QC value within limits for K Recovery = 103.43%								
Mg†	224255.1	55.2	mg/L	0.01	55.2	mg/L	0.01	0.02%
QC value greater than the upper limit for Mg Recovery = 110.40%								
Mo†	68273.9	4.58	mg/L	0.028	4.58	mg/L	0.028	0.62%
QC value within limits for Mo Recovery = 91.54%								
Na†	177326.7	52.7	mg/L	0.30	52.7	mg/L	0.30	0.56%
QC value within limits for Na Recovery = 105.39%								
Ni†	106257.0	4.88	mg/L	0.044	4.88	mg/L	0.044	0.90%
QC value within limits for Ni Recovery = 97.56%								
Pb†	25997.8	4.86	mg/L	0.026	4.86	mg/L	0.026	0.54%
QC value within limits for Pb Recovery = 97.18%								
Tl†	14930.8	5.02	mg/L	0.053	5.02	mg/L	0.053	1.06%
QC value within limits for Tl Recovery = 100.50%								
V†	760769.5	4.71	mg/L	0.003	4.71	mg/L	0.003	0.05%
QC value within limits for V Recovery = 94.19%								
Zn†	250639.7	4.91	mg/L	0.006	4.91	mg/L	0.006	0.12%
QC value within limits for Zn Recovery = 98.11%								
QC Failed. Retry.								

Sequence No.: 129
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/14/2007 03:01:40
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	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	263678.3	102	%	1.0				0.93%
Yr	249219.7	95.6	%	0.02				0.02%
B_†	62817.5	2.37	mg/L	0.005	2.37	mg/L	0.005	0.20%
QC value within limits for B_ Recovery = 94.98%								
Ba†	380211.6	4.65	mg/L	0.016	4.65	mg/L	0.016	0.34%
QC value within limits for Ba Recovery = 93.02%								
Be†	6109558.6	1.86	mg/L	0.024	1.86	mg/L	0.024	1.31%
QC value within limits for Be Recovery = 93.16%								
Ca†	522584.6	53.1	mg/L	0.11	53.1	mg/L	0.11	0.22%
QC value within limits for Ca Recovery = 106.13%								
Cd†	59005.1	2.54	mg/L	0.027	2.54	mg/L	0.027	1.04%
QC value within limits for Cd Recovery = 101.74%								
Co†	113545.5	5.01	mg/L	0.045	5.01	mg/L	0.045	0.89%

QC value within limits for Co Recovery = 100.17%

Cr†	333959.6	4.76 mg/L	0.002	4.76 mg/L	0.002	0.05%

QC value within limits for Cr Recovery = 95.14%

Cu†	1915651.5	4.49 mg/L	0.005	4.49 mg/L	0.005	0.12%

QC value less than the lower limit for Cu Recovery = 89.76%

Fe†	9462.2	5.18 mg/L	0.070	5.18 mg/L	0.070	1.35%

QC value within limits for Fe Recovery = 103.59%

K†	67896.3	51.2 mg/L	0.93	51.2 mg/L	0.93	1.82%

QC value within limits for K Recovery = 102.48%

Mg†	223074.2	54.9 mg/L	0.01	54.9 mg/L	0.01	0.03%

QC value within limits for Mg Recovery = 109.82%

Mo†	68769.7	4.61 mg/L	0.051	4.61 mg/L	0.051	1.10%

QC value within limits for Mo Recovery = 92.20%

Na†	177367.8	52.7 mg/L	0.09	52.7 mg/L	0.09	0.17%

QC value within limits for Na Recovery = 105.41%

Ni†	106591.8	4.89 mg/L	0.046	4.89 mg/L	0.046	0.94%

QC value within limits for Ni Recovery = 97.86%

Pb†	26144.0	4.89 mg/L	0.056	4.89 mg/L	0.056	1.15%

QC value within limits for Pb Recovery = 97.73%

Tl†	15078.3	5.07 mg/L	0.056	5.07 mg/L	0.056	1.09%

QC value within limits for Tl Recovery = 101.49%

V†	762422.6	4.72 mg/L	0.001	4.72 mg/L	0.001	0.03%

QC value within limits for V Recovery = 94.39%

Zn†	251138.6	4.92 mg/L	0.006	4.92 mg/L	0.006	0.12%

QC value within limits for Zn Recovery = 98.30%

QC Failed. Continue with analysis.

Sequence No.: 130 **Autosampler Location: 0**
Sample ID: CCB **Date Collected: 8/14/2007 03:04:58**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	279192.3	108	%	0.5				0.43%
Yr	249663.3	95.8	%	0.69				0.72%
B_†	727.1	0.0276	mg/L	0.00091	0.0276	mg/L	0.00091	3.31%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	-1.3	-0.00002	mg/L	0.000011	-0.00002	mg/L	0.000011	67.86%
QC value within limits for Ba Recovery = Not calculated								
Be†	-119.7	-0.00004	mg/L	0.000004	-0.00004	mg/L	0.000004	10.40%
QC value within limits for Be Recovery = Not calculated								
Ca†	89.0	0.00904	mg/L	0.001093	0.00904	mg/L	0.001093	12.10%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-2.1	-0.00009	mg/L	0.000000	-0.00009	mg/L	0.000000	0.30%
QC value within limits for Cd Recovery = Not calculated								
Co†	-5.5	-0.00024	mg/L	0.000227	-0.00024	mg/L	0.000227	93.70%
QC value within limits for Co Recovery = Not calculated								
Cr†	96.4	0.00137	mg/L	0.000092	0.00137	mg/L	0.000092	6.70%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-245.6	-0.00058	mg/L	0.000121	-0.00058	mg/L	0.000121	21.10%
QC value within limits for Cu Recovery = Not calculated								
Fe†	-2.6	-0.00141	mg/L	0.000091	-0.00141	mg/L	0.000091	6.41%
QC value within limits for Fe Recovery = Not calculated								
K†	-94.5	-0.0713	mg/L	0.00634	-0.0713	mg/L	0.00634	8.89%
QC value within limits for K Recovery = Not calculated								
Mg†	1.3	0.00031	mg/L	0.000230	0.00031	mg/L	0.000230	74.45%
QC value within limits for Mg Recovery = Not calculated								
Mo†	24.1	0.00162	mg/L	0.000201	0.00162	mg/L	0.000201	12.42%
QC value within limits for Mo Recovery = Not calculated								
Na†	598.5	0.178	mg/L	0.0221	0.178	mg/L	0.0221	12.41%
QC value within limits for Na Recovery = Not calculated								
Ni†	-12.1	-0.00055	mg/L	0.000032	-0.00055	mg/L	0.000032	5.85%
QC value within limits for Ni Recovery = Not calculated								
Pb†	13.0	0.00243	mg/L	0.000525	0.00243	mg/L	0.000525	21.62%
QC value within limits for Pb Recovery = Not calculated								
Tl†	5.2	0.00174	mg/L	0.000006	0.00174	mg/L	0.000006	0.37%
QC value within limits for Tl Recovery = Not calculated								
V†	9.0	0.00006	mg/L	0.000067	0.00006	mg/L	0.000067	105.58%
QC value within limits for V Recovery = Not calculated								
Zn†	1.5	0.00003	mg/L	0.000065	0.00003	mg/L	0.000065	199.66%
QC value within limits for Zn Recovery = Not calculated								

QC Failed. Retry.

Sequence No.: 131 **Autosampler Location: 0**
Sample ID: CCB **Date Collected: 8/14/2007 03:07:43**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	280745.4	109	%	2.6				2.36%
Yr	250716.8	96.2		0.44				0.45%
B_†	534.2	0.0203	mg/L	0.00147	0.0203	mg/L	0.00147	7.26%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	-8.6	-0.00011	mg/L	0.000045	-0.00011	mg/L	0.000045	42.32%
QC value within limits for Ba Recovery = Not calculated								
Be†	-165.9	-0.00005	mg/L	0.000008	-0.00005	mg/L	0.000008	14.83%
QC value within limits for Be Recovery = Not calculated								
Ca†	58.2	0.00591	mg/L	0.000435	0.00591	mg/L	0.000435	7.35%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-0.5	-0.00002	mg/L	0.000345	-0.00002	mg/L	0.000345	>999.9%
QC value within limits for Cd Recovery = Not calculated								
Co†	-4.3	-0.00019	mg/L	0.000014	-0.00019	mg/L	0.000014	7.24%
QC value within limits for Co Recovery = Not calculated								
Cr†	71.6	0.00102	mg/L	0.000209	0.00102	mg/L	0.000209	20.49%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-172.0	-0.00040	mg/L	0.000173	-0.00040	mg/L	0.000173	42.95%
QC value within limits for Cu Recovery = Not calculated								
Fe†	-2.1	-0.00117	mg/L	0.001124	-0.00117	mg/L	0.001124	96.31%
QC value within limits for Fe Recovery = Not calculated								
K†	-168.0	-0.127	mg/L	0.0573	-0.127	mg/L	0.0573	45.18%
QC value within limits for K Recovery = Not calculated								
Mg†	-1.2	-0.00029	mg/L	0.000430	-0.00029	mg/L	0.000430	148.70%
QC value within limits for Mg Recovery = Not calculated								
Mo†	6.5	0.00043	mg/L	0.000314	0.00043	mg/L	0.000314	72.19%
QC value within limits for Mo Recovery = Not calculated								
Na†	533.8	0.159	mg/L	0.0040	0.159	mg/L	0.0040	2.52%
QC value within limits for Na Recovery = Not calculated								
Ni†	-9.9	-0.00045	mg/L	0.000205	-0.00045	mg/L	0.000205	45.22%
QC value within limits for Ni Recovery = Not calculated								
Pb†	15.0	0.00281	mg/L	0.001612	0.00281	mg/L	0.001612	57.35%
QC value within limits for Pb Recovery = Not calculated								
Tl†	-0.6	-0.00021	mg/L	0.000607	-0.00021	mg/L	0.000607	284.11%
QC value within limits for Tl Recovery = Not calculated								
V†	-3.0	-0.00001	mg/L	0.000134	-0.00001	mg/L	0.000134	>999.9%
QC value within limits for V Recovery = Not calculated								
Zn†	-5.5	-0.00010	mg/L	0.000192	-0.00010	mg/L	0.000192	183.85%
QC value within limits for Zn Recovery = Not calculated								
QC Failed. Retry.								

Sequence No.: 132
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 8/14/2007 03:10:28
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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	284901.7	110	%	0.3				0.29%
Yr	259138.7	99.4	%	1.90				1.92%
B_†	400.6	0.0152	mg/L	0.00026	0.0152	mg/L	0.00026	1.73%
QC value within limits for B_ Recovery = Not calculated								
Ba†	-5.0	-0.00006	mg/L	0.000035	-0.00006	mg/L	0.000035	57.16%
QC value within limits for Ba Recovery = Not calculated								
Be†	-101.9	-0.00003	mg/L	0.000004	-0.00003	mg/L	0.000004	13.49%
QC value within limits for Be Recovery = Not calculated								
Ca†	38.7	0.00393	mg/L	0.002868	0.00393	mg/L	0.002868	73.03%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-9.2	-0.00039	mg/L	0.000060	-0.00039	mg/L	0.000060	15.15%
QC value within limits for Cd Recovery = Not calculated								
Co†	-4.5	-0.00020	mg/L	0.000380	-0.00020	mg/L	0.000380	190.73%

QC value within limits for Co Recovery = Not calculated

Crt	53.4	0.00076 mg/L	0.000111	0.00076 mg/L	0.000111	14.61%

QC value within limits for Cr Recovery = Not calculated

Cut	-301.2	-0.00071 mg/L	0.000135	-0.00071 mg/L	0.000135	19.10%

QC value within limits for Cu Recovery = Not calculated

Fet	-1.3	-0.00071 mg/L	0.000958	-0.00071 mg/L	0.000958	134.80%

QC value within limits for Fe Recovery = Not calculated

Kt	-108.8	-0.0821 mg/L	0.01357	-0.0821 mg/L	0.01357	16.52%

QC value within limits for K Recovery = Not calculated

Mgt	6.8	[illegible] mg/L	0.000366	0.00167 mg/L	0.000366	21.94%

QC value within limits for Mg Recovery = Not calculated

Mot	2.4	0.00016 mg/L	0.000057	0.00016 mg/L	0.000057	35.34%

QC value within limits for Mo Recovery = Not calculated

Nat	448.3	0.133 mg/L	0.0035	0.133 mg/L	0.0035	2.61%

QC value within limits for Na Recovery = Not calculated

Nit	-16.6	-0.00076 mg/L	0.000269	-0.00076 mg/L	0.000269	35.27%

QC value within limits for Ni Recovery = Not calculated

Pbt	14.7	0.00275 mg/L	0.001078	0.00275 mg/L	0.001078	39.14%

QC value within limits for Pb Recovery = Not calculated

Tlt	2.9	0.00096 mg/L	0.000363	0.00096 mg/L	0.000363	37.70%

QC value within limits for Tl Recovery = Not calculated

Vt	-39.2	-0.00024 mg/L	0.000119	-0.00024 mg/L	0.000119	50.05%

QC value within limits for V Recovery = Not calculated

Znt	-22.7	-0.00044 mg/L	0.000002	-0.00044 mg/L	0.000002	0.55%

QC value within limits for Zn Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 133
Sample ID: MCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 8/14/2007 03:14:11
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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	277649.6	108	%	2.7				2.48%
Yr	244177.4	93.7	%	2.14				2.29%
B_†	30148.2	1.14	mg/L	0.000	1.14	mg/L	0.000	0.02%
QC value within limits for B_ Recovery = 91.16%								
Ba†	187419.0	2.29	mg/L	0.014	2.29	mg/L	0.014	0.62%
QC value within limits for Ba Recovery = 91.71%								
Be†	2962246.2	0.903	mg/L	0.0058	0.903	mg/L	0.0058	0.65%
QC value within limits for Be Recovery = 90.33%								
Ca†	260393.7	26.4	mg/L	0.00	26.4	mg/L	0.00	0.00%
QC value within limits for Ca Recovery = 105.76%								
Cd†	28816.7	1.24	mg/L	0.009	1.24	mg/L	0.009	0.71%
QC value within limits for Cd Recovery = 99.37%								
Co†	55344.4	2.44	mg/L	0.009	2.44	mg/L	0.009	0.38%
QC value within limits for Co Recovery = 97.65%								
Cr†	162968.5	2.32	mg/L	0.013	2.32	mg/L	0.013	0.57%
QC value within limits for Cr Recovery = 92.85%								
Cu†	930209.2	2.18	mg/L	0.001	2.18	mg/L	0.001	0.03%
QC value less than the lower limit for Cu Recovery = 87.17%								
Fe†	4817.0	2.64	mg/L	0.082	2.64	mg/L	0.082	3.10%
QC value within limits for Fe Recovery = 105.47%								
K†	33967.1	25.6	mg/L	0.90	25.6	mg/L	0.90	3.51%
QC value within limits for K Recovery = 102.54%								
Mg†	112297.5	27.6	mg/L	0.08	27.6	mg/L	0.08	0.27%
QC value greater than the upper limit for Mg Recovery = 110.57%								
Mo†	33198.5	2.23	mg/L	0.016	2.23	mg/L	0.016	0.71%
QC value less than the lower limit for Mo Recovery = 89.02%								
Na†	88821.8	26.4	mg/L	0.11	26.4	mg/L	0.11	0.43%
QC value within limits for Na Recovery = 105.57%								
Ni†	52926.3	2.43	mg/L	0.023	2.43	mg/L	0.023	0.93%
QC value within limits for Ni Recovery = 97.19%								
Pb†	12900.6	2.41	mg/L	0.007	2.41	mg/L	0.007	0.31%
QC value within limits for Pb Recovery = 96.44%								
Tl†	7511.4	2.53	mg/L	0.001	2.53	mg/L	0.001	0.06%
QC value within limits for Tl Recovery = 101.11%								
V†	370671.1	2.29	mg/L	0.012	2.29	mg/L	0.012	0.52%
QC value within limits for V Recovery = 91.78%								
Zn†	123040.3	2.41	mg/L	0.005	2.41	mg/L	0.005	0.21%
QC value within limits for Zn Recovery = 96.31%								

QC Failed. Retry.

Sequence No.: 134
Sample ID: MCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 8/14/2007 03:15:49
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	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	276535.2	107	%	1.2				1.09%
Yr	247576.1	95.0	%	0.27				0.29%
B_†	30469.1	1.15	mg/L	0.002	1.15	mg/L	0.002	0.15%
QC value within limits for B_ Recovery = 92.13%								
Ba†	186331.0	2.28	mg/L	0.003	2.28	mg/L	0.003	0.13%
QC value within limits for Ba Recovery = 91.18%								
Be†	2949141.5	0.899	mg/L	0.0020	0.899	mg/L	0.0020	0.22%
QC value less than the lower limit for Be Recovery = 89.94%								
Ca†	260564.7	26.5	mg/L	0.02	26.5	mg/L	0.02	0.09%
QC value within limits for Ca Recovery = 105.83%								
Cd†	28246.7	1.22	mg/L	0.010	1.22	mg/L	0.010	0.78%
QC value within limits for Cd Recovery = 97.42%								
Co†	55034.1	2.43	mg/L	0.005	2.43	mg/L	0.005	0.21%
QC value within limits for Co Recovery = 97.10%								
Cr†	162831.5	2.32	mg/L	0.005	2.32	mg/L	0.005	0.20%
QC value within limits for Cr Recovery = 92.78%								
Cu†	922410.1	2.16	mg/L	0.004	2.16	mg/L	0.004	0.20%
QC value less than the lower limit for Cu Recovery = 86.44%								
Fe†	4738.7	2.59	mg/L	0.053	2.59	mg/L	0.053	2.03%
QC value within limits for Fe Recovery = 103.75%								
K†	33785.7	25.5	mg/L	0.29	25.5	mg/L	0.29	1.15%
QC value within limits for K Recovery = 101.99%								
Mg†	111962.6	27.6	mg/L	0.02	27.6	mg/L	0.02	0.08%
QC value greater than the upper limit for Mg Recovery = 110.24%								
Mo†	32741.8	2.19	mg/L	0.025	2.19	mg/L	0.025	1.13%
QC value less than the lower limit for Mo Recovery = 87.80%								
Na†	88601.7	26.3	mg/L	0.07	26.3	mg/L	0.07	0.27%
QC value within limits for Na Recovery = 105.31%								
Ni†	52152.2	2.39	mg/L	0.028	2.39	mg/L	0.028	1.17%
QC value within limits for Ni Recovery = 95.76%								
Pb†	12693.1	2.37	mg/L	0.027	2.37	mg/L	0.027	1.13%
QC value within limits for Pb Recovery = 94.89%								
Tl†	7375.5	2.48	mg/L	0.008	2.48	mg/L	0.008	0.31%
QC value within limits for Tl Recovery = 99.29%								
V†	369770.4	2.29	mg/L	0.006	2.29	mg/L	0.006	0.26%
QC value within limits for V Recovery = 91.56%								
Zn†	122879.1	2.40	mg/L	0.000	2.40	mg/L	0.000	0.01%
QC value within limits for Zn Recovery = 96.20%								

QC Failed. Continue with analysis.

Sequence No.: 138
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 8/14/2007 03:33:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	218.0 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	255323.9	99.0	%	1.12				1.13%
Yr	235093.5	90.2	%	1.12				1.24%
B_†	1965.7	0.0746	mg/L	0.00164	0.0746	mg/L	0.00164	2.20%
QC value within limits for B_	Recovery = Not calculated							
Ba†	107.7	0.00132	mg/L	0.000074	0.00132	mg/L	0.000074	5.60%
QC value within limits for Ba	Recovery = Not calculated							
Be†	-951.4	-0.00029	mg/L	0.000017	-0.00029	mg/L	0.000017	5.99%
QC value within limits for Be	Recovery = Not calculated							
Ca†	2519277.8	256	mg/L	4.0	256	mg/L	4.0	1.55%
QC value within limits for Ca	Recovery = 102.33%							
Cd†	-59.6	-0.00255	mg/L	0.000202	-0.00255	mg/L	0.000202	7.93%
QC value within limits for Cd	Recovery = Not calculated							
Co†	23.1	0.00102	mg/L	0.000083	0.00102	mg/L	0.000083	8.19%
QC value within limits for Co	Recovery = Not calculated							
Cr†	-62.9	-0.00090	mg/L	0.000262	-0.00090	mg/L	0.000262	29.26%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	-6248.2	-0.0146	mg/L	0.00017	-0.0146	mg/L	0.00017	1.16%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	181225.8	99.2	mg/L	0.00	99.2	mg/L	0.00	0.00%
QC value within limits for Fe	Recovery = 99.20%							
K†	83.3	0.0628	mg/L	0.03588	0.0628	mg/L	0.03588	57.10%
QC value within limits for K	Recovery = Not calculated							
Mg†	1045951.3	257	mg/L	4.3	257	mg/L	4.3	1.66%
QC value within limits for Mg	Recovery = 102.98%							
Mo†	30.0	0.00201	mg/L	0.000122	0.00201	mg/L	0.000122	6.05%
QC value within limits for Mo	Recovery = Not calculated							
Na†	2611.4	0.776	mg/L	0.0067	0.776	mg/L	0.0067	0.86%
QC value within limits for Na	Recovery = Not calculated							
Ni†	-17.7	-0.00081	mg/L	0.000038	-0.00081	mg/L	0.000038	4.73%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	-201.7	-0.0377	mg/L	0.00001	-0.0377	mg/L	0.00001	0.01%
QC value within limits for Pb	Recovery = Not calculated							
Tl†	56.8	0.0190	mg/L	0.00538	0.0190	mg/L	0.00538	28.27%
QC value within limits for Tl	Recovery = Not calculated							
V†	-1973.4	-0.0122	mg/L	0.00016	-0.0122	mg/L	0.00016	1.34%
QC value within limits for V	Recovery = Not calculated							
Zn†	1009.6	0.0199	mg/L	0.00057	0.0199	mg/L	0.00057	2.87%
QC value within limits for Zn	Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 139
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 8/14/2007 03:37:09
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.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	257700.1	99.9	%	3.49				3.49%
Yr	234528.9	90.0	%	2.13				2.37%
B_†	1757.4	0.0663	mg/L	0.00046	0.0663	mg/L	0.00046	0.70%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	18349.3	0.224	mg/L	0.0058	0.224	mg/L	0.0058	2.58%
QC value within limits for Ba Recovery = 89.79%								
Be†	720709.4	0.220	mg/L	0.0002	0.220	mg/L	0.0002	0.08%
QC value within limits for Be Recovery = 87.91%								
Ca†	2452692.2	249	mg/L	5.5	249	mg/L	5.5	2.19%
QC value within limits for Ca Recovery = 99.62%								
Cd†	10476.2	0.449	mg/L	0.0112	0.449	mg/L	0.0112	2.49%
QC value within limits for Cd Recovery = 89.80%								
Co†	5072.1	0.224	mg/L	0.0054	0.224	mg/L	0.0054	2.41%
QC value within limits for Co Recovery = 89.49%								
Cr†	15875.9	0.226	mg/L	0.0059	0.226	mg/L	0.0059	2.62%
QC value within limits for Cr Recovery = 90.46%								
Cu†	90436.8	0.212	mg/L	0.0009	0.212	mg/L	0.0009	0.44%
QC value within limits for Cu Recovery = 84.74%								
Fe†	177528.3	97.2	mg/L	0.22	97.2	mg/L	0.22	0.22%
QC value within limits for Fe Recovery = 97.17%								
K†	-14.3	-0.0108	mg/L	0.06704	-0.0108	mg/L	0.06704	619.92%
QC value within limits for K Recovery = Not calculated								
Mg†	1017177.5	250	mg/L	5.3	250	mg/L	5.3	2.12%
QC value within limits for Mg Recovery = 100.15%								
Mo†	24.1	0.00161	mg/L	0.000070	0.00161	mg/L	0.000070	4.34%
QC value within limits for Mo Recovery = Not calculated								
Na†	1565.3	0.465	mg/L	0.0218	0.465	mg/L	0.0218	4.68%
QC value within limits for Na Recovery = Not calculated								
Ni†	9240.6	0.424	mg/L	0.0110	0.424	mg/L	0.0110	2.58%
QC value within limits for Ni Recovery = 84.84%								
Pb†	2184.0	0.408	mg/L	0.0101	0.408	mg/L	0.0101	2.49%
QC value within limits for Pb Recovery = 81.64%								
Tl†	36.9	0.0130	mg/L	0.00064	0.0130	mg/L	0.00064	4.94%
QC value within limits for Tl Recovery = Not calculated								
V†	34261.5	0.212	mg/L	0.0000	0.212	mg/L	0.0000	0.00%
QC value within limits for V Recovery = 84.86%								
Zn†	24851.1	0.487	mg/L	0.0122	0.487	mg/L	0.0122	2.50%
QC value within limits for Zn Recovery = 97.36%								

QC Failed. Continue with analysis.

Sequence No.: 140 **Autosampler Location: 0**
Sample ID: Wash **Date Collected: 8/14/2007 03:41:05**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **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	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	289440.0	112	%	1.8				1.61%
Yr	247428.1	94.9	%	0.13				0.14%
B_†	200.6	0.00762	mg/L	0.000179	0.00762	mg/L	0.000179	2.35%
QC value within limits for B_ Recovery = Not calculated								
Ba†	-9.3	-0.00011	mg/L	0.000030	-0.00011	mg/L	0.000030	26.15%
QC value within limits for Ba Recovery = Not calculated								
Be†	-64.0	-0.00002	mg/L	0.000003	-0.00002	mg/L	0.000003	15.70%
QC value within limits for Be Recovery = Not calculated								
Ca†	93.8	0.00953	mg/L	0.001413	0.00953	mg/L	0.001413	14.84%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-6.1	-0.00026	mg/L	0.000049	-0.00026	mg/L	0.000049	18.72%
QC value within limits for Cd Recovery = Not calculated								
Co†	-7.5	-0.00033	mg/L	0.000034	-0.00033	mg/L	0.000034	10.25%
QC value within limits for Co Recovery = Not calculated								
Cr†	0.5	0.00001	mg/L	0.000021	0.00001	mg/L	0.000021	314.63%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-363.1	-0.00085	mg/L	0.000406	-0.00085	mg/L	0.000406	47.75%
QC value within limits for Cu Recovery = Not calculated								
Fe†	-0.9	-0.00049	mg/L	0.001131	-0.00049	mg/L	0.001131	232.79%
QC value within limits for Fe Recovery = Not calculated								
K†	-105.5	-0.0796	mg/L	0.00470	-0.0796	mg/L	0.00470	5.91%
QC value within limits for K Recovery = Not calculated								
Mg†	3.2	0.00079	mg/L	0.000539	0.00079	mg/L	0.000539	67.93%
QC value within limits for Mg Recovery = Not calculated								
Mo†	-3.8	-0.00025	mg/L	0.000095	-0.00025	mg/L	0.000095	37.48%
QC value within limits for Mo Recovery = Not calculated								
Na†	569.0	0.169	mg/L	0.0101	0.169	mg/L	0.0101	5.99%
QC value within limits for Na Recovery = Not calculated								
Ni†	-13.5	-0.00062	mg/L	0.000064	-0.00062	mg/L	0.000064	10.26%
QC value within limits for Ni Recovery = Not calculated								
Pb†	18.0	0.00336	mg/L	0.000993	0.00336	mg/L	0.000993	29.56%
QC value within limits for Pb Recovery = Not calculated								
Tl†	-0.5	-0.00016	mg/L	0.000185	-0.00016	mg/L	0.000185	118.61%
QC value within limits for Tl Recovery = Not calculated								
V†	-30.0	-0.00018	mg/L	0.000329	-0.00018	mg/L	0.000329	178.28%
QC value within limits for V Recovery = Not calculated								
Zn†	-27.9	-0.00055	mg/L	0.000083	-0.00055	mg/L	0.000083	15.21%
QC value within limits for Zn Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 141
Sample ID: QC-25 1ppm
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 8/14/2007 03:44:34
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	283269.1	110	%	0.0				0.00%
Yr	245157.6	94.0	%	0.87				0.93%
B_†	22755.2	0.862	mg/L	0.0001	0.862	mg/L	0.0001	0.01%
QC value less than the lower limit for B_ Recovery = 86.18%								
Ba†	75537.7	0.924	mg/L	0.0000	0.924	mg/L	0.0000	0.00%
QC value within limits for Ba Recovery = 92.41%								
Be†	2804476.4	0.855	mg/L	0.0009	0.855	mg/L	0.0009	0.11%
QC value less than the lower limit for Be Recovery = 85.52%								
Ca†	10465.5	1.06	mg/L	0.002	1.06	mg/L	0.002	0.19%
QC value within limits for Ca Recovery = 106.27%								
Cd†	21423.2	0.920	mg/L	0.0140	0.920	mg/L	0.0140	1.52%
QC value within limits for Cd Recovery = 92.03%								
Co†	22413.5	0.989	mg/L	0.0149	0.989	mg/L	0.0149	1.51%
QC value within limits for Co Recovery = 98.87%								
Cr†	64800.1	0.923	mg/L	0.0012	0.923	mg/L	0.0012	0.13%
QC value within limits for Cr Recovery = 92.30%								
Cu†	361259.5	0.846	mg/L	0.0009	0.846	mg/L	0.0009	0.11%
QC value less than the lower limit for Cu Recovery = 84.64%								
Fe†	1892.1	1.04	mg/L	0.001	1.04	mg/L	0.001	0.05%
QC value within limits for Fe Recovery = 103.57%								
K†	13105.4	9.89	mg/L	0.010	9.89	mg/L	0.010	0.10%
QC value within limits for K Recovery = 98.90%								
Mg†	4658.9	1.15	mg/L	0.004	1.15	mg/L	0.004	0.31%
QC value greater than the upper limit for Mg Recovery = 114.68%								
Mo†	12775.1	0.856	mg/L	0.0118	0.856	mg/L	0.0118	1.38%
QC value less than the lower limit for Mo Recovery = 85.64%								
Na†	4299.9	1.28	mg/L	0.002	1.28	mg/L	0.002	0.15%
QC value greater than the upper limit for Na Recovery = 127.77%								
Ni†	21114.9	0.969	mg/L	0.0141	0.969	mg/L	0.0141	1.45%
QC value within limits for Ni Recovery = 96.93%								
Pb†	5164.7	0.965	mg/L	0.0142	0.965	mg/L	0.0142	1.47%
QC value within limits for Pb Recovery = 96.53%								
Tl†	2908.9	0.979	mg/L	0.0140	0.979	mg/L	0.0140	1.43%
QC value within limits for Tl Recovery = 97.89%								
V†	142284.7	0.881	mg/L	0.0009	0.881	mg/L	0.0009	0.10%
QC value less than the lower limit for V Recovery = 88.10%								
Zn†	46592.6	0.911	mg/L	0.0010	0.911	mg/L	0.0010	0.11%
QC value within limits for Zn Recovery = 91.15%								
QC Failed. Retry.								

Sequence No.: 142
Sample ID: QC-25 1ppm
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 8/14/2007 03:47:24
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	479091.4	186	%	27.2				14.64%
Yr	251551.1	96.5	%	2.67				2.76%
B_†	5152.9	0.196	mg/L	0.2663	0.196	mg/L	0.2663	136.18%
QC value less than the lower limit for B_ Recovery = 19.56%								
Ba†	16573.0	0.203	mg/L	0.2868	0.203	mg/L	0.2868	141.47%
QC value less than the lower limit for Ba Recovery = 20.27%								
Be†	705592.7	0.215	mg/L	0.3028	0.215	mg/L	0.3028	140.73%
QC value less than the lower limit for Be Recovery = 21.52%								
Ca†	10298.1	1.05	mg/L	0.067	1.05	mg/L	0.067	6.40%
QC value within limits for Ca Recovery = 104.57%								
Cd†	196.4	0.00844	mg/L	0.014023	0.00844	mg/L	0.014023	166.10%
QC value less than the lower limit for Cd Recovery = 0.84%								
Co†	243.8	0.0108	mg/L	0.01489	0.0108	mg/L	0.01489	138.46%
QC value less than the lower limit for Co Recovery = 1.08%								
Cr†	13879.8	0.198	mg/L	0.2830	0.198	mg/L	0.2830	143.16%
QC value less than the lower limit for Cr Recovery = 19.77%								
Cu†	76495.1	0.179	mg/L	0.2628	0.179	mg/L	0.2628	146.77%
QC value less than the lower limit for Cu Recovery = 17.90%								
Fe†	1866.3	1.02	mg/L	0.057	1.02	mg/L	0.057	5.56%
QC value within limits for Fe Recovery = 102.15%								
K†	13016.3	9.82	mg/L	0.010	9.82	mg/L	0.010	0.11%
QC value within limits for K Recovery = 98.23%								
Mg†	4582.1	1.13	mg/L	0.060	1.13	mg/L	0.060	5.34%
QC value greater than the upper limit for Mg Recovery = 112.79%								
Mo†	138.2	0.00927	mg/L	0.014218	0.00927	mg/L	0.014218	153.42%
QC value less than the lower limit for Mo Recovery = 0.93%								
Na†	4320.8	1.28	mg/L	0.016	1.28	mg/L	0.016	1.24%
QC value greater than the upper limit for Na Recovery = 128.39%								
Ni†	203.3	0.00933	mg/L	0.014255	0.00933	mg/L	0.014255	152.73%
QC value less than the lower limit for Ni Recovery = 0.93%								
Pb†	106.7	0.0199	mg/L	0.01576	0.0199	mg/L	0.01576	79.05%
QC value less than the lower limit for Pb Recovery = 1.99%								
Tl†	42.7	0.0149	mg/L	0.01666	0.0149	mg/L	0.01666	112.03%
QC value less than the lower limit for Tl Recovery = 1.49%								
V†	30986.1	0.192	mg/L	0.2724	0.192	mg/L	0.2724	141.98%
QC value less than the lower limit for V Recovery = 19.18%								
Zn†	10011.8	0.197	mg/L	0.2848	0.197	mg/L	0.2848	144.44%
QC value less than the lower limit for Zn Recovery = 19.72%								

QC Failed. Continue with analysis.

Sequence No.: 143
Sample ID: ECV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/14/2007 03:51:08
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.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	281550.8	109	%	0.0				0.04%
Yr	243267.3	93.3	%	0.58				0.62%
B_†	60874.3	2.30	mg/L	0.001	2.30	mg/L	0.001	0.03%
QC value within limits for B_ Recovery = 92.04%								
Ba†	368788.1	4.51	mg/L	0.009	4.51	mg/L	0.009	0.19%
QC value within limits for Ba Recovery = 90.23%								
Be†	5794375.8	1.77	mg/L	0.022	1.77	mg/L	0.022	1.26%
QC value less than the lower limit for Be Recovery = 88.35%								
Ca†	514812.0	52.3	mg/L	0.10	52.3	mg/L	0.10	0.19%
QC value within limits for Ca Recovery = 104.55%								
Cd†	56299.2	2.43	mg/L	0.065	2.43	mg/L	0.065	2.67%
QC value within limits for Cd Recovery = 97.07%								
Co†	108489.9	4.79	mg/L	0.135	4.79	mg/L	0.135	2.82%
QC value within limits for Co Recovery = 95.71%								
Cr†	325870.1	4.64	mg/L	0.007	4.64	mg/L	0.007	0.14%
QC value within limits for Cr Recovery = 92.83%								
Cu†	1867611.0	4.38	mg/L	0.024	4.38	mg/L	0.024	0.54%
QC value less than the lower limit for Cu Recovery = 87.51%								
Fe†	9491.8	5.20	mg/L	0.193	5.20	mg/L	0.193	3.71%
QC value within limits for Fe Recovery = 103.91%								
K†	68487.7	51.7	mg/L	1.90	51.7	mg/L	1.90	3.68%
QC value within limits for K Recovery = 103.37%								
Mg†	221333.5	54.5	mg/L	0.03	54.5	mg/L	0.03	0.05%
QC value within limits for Mg Recovery = 108.96%								
Mo†	65028.1	4.36	mg/L	0.127	4.36	mg/L	0.127	2.92%
QC value less than the lower limit for Mo Recovery = 87.19%								
Na†	175372.4	52.1	mg/L	0.06	52.1	mg/L	0.06	0.11%
QC value within limits for Na Recovery = 104.22%								
Ni†	101534.5	4.66	mg/L	0.138	4.66	mg/L	0.138	2.97%
QC value within limits for Ni Recovery = 93.22%								
Pb†	24765.9	4.63	mg/L	0.132	4.63	mg/L	0.132	2.86%
QC value within limits for Pb Recovery = 92.57%								
Tl†	14272.8	4.80	mg/L	0.128	4.80	mg/L	0.128	2.66%
QC value within limits for Tl Recovery = 96.08%								
V†	743990.3	4.61	mg/L	0.000	4.61	mg/L	0.000	0.01%
QC value within limits for V Recovery = 92.11%								
Zn†	243960.3	4.78	mg/L	0.005	4.78	mg/L	0.005	0.11%
QC value within limits for Zn Recovery = 95.50%								

QC Failed. Retry.

Sequence No.: 144
Sample ID: ECV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 8/14/2007 03:52:51
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	Conc.	Calib Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sca	260393.7	101	%	1.4				1.42%
Yr	243980.7	93.6	%	1.85				1.98%
B_†	61339.4	2.32	mg/L	0.013	2.32	mg/L	0.013	0.55%
QC value within limits for B_ Recovery = 92.74%								
Ba†	371901.6	4.55	mg/L	0.015	4.55	mg/L	0.015	0.33%
QC value within limits for Ba Recovery = 90.99%								
Be†	6037860.3	1.84	mg/L	0.063	1.84	mg/L	0.063	3.41%
QC value within limits for Be Recovery = 92.06%								
Ca†	514439.5	52.2	mg/L	0.03	52.2	mg/L	0.03	0.06%
QC value within limits for Ca Recovery = 104.48%								
Cd†	57897.8	2.50	mg/L	0.054	2.50	mg/L	0.054	2.16%
QC value within limits for Cd Recovery = 99.82%								
Co†	109648.8	4.84	mg/L	0.015	4.84	mg/L	0.015	0.30%
QC value within limits for Co Recovery = 96.73%								
Cr†	327798.1	4.67	mg/L	0.000	4.67	mg/L	0.000	0.01%
QC value within limits for Cr Recovery = 93.38%								
Cu†	1881069.2	4.41	mg/L	0.042	4.41	mg/L	0.042	0.95%
QC value less than the lower limit for Cu Recovery = 88.14%								
Fe†	9575.6	5.24	mg/L	0.069	5.24	mg/L	0.069	1.32%
QC value within limits for Fe Recovery = 104.83%								
K†	68941.0	52.0	mg/L	0.46	52.0	mg/L	0.46	0.88%
QC value within limits for K Recovery = 104.06%								
Mg†	221194.6	54.4	mg/L	0.11	54.4	mg/L	0.11	0.21%
QC value within limits for Mg Recovery = 108.89%								
Mo†	67192.2	4.50	mg/L	0.114	4.50	mg/L	0.114	2.54%
QC value within limits for Mo Recovery = 90.09%								
Na†	176761.6	52.5	mg/L	0.39	52.5	mg/L	0.39	0.75%
QC value within limits for Na Recovery = 105.05%								
Ni†	104109.8	4.78	mg/L	0.113	4.78	mg/L	0.113	2.36%
QC value within limits for Ni Recovery = 95.59%								
Pb†	25482.5	4.76	mg/L	0.127	4.76	mg/L	0.127	2.66%
QC value within limits for Pb Recovery = 95.25%								
Tl†	14724.3	4.96	mg/L	0.118	4.96	mg/L	0.118	2.37%
QC value within limits for Tl Recovery = 99.11%								
V†	746716.9	4.62	mg/L	0.004	4.62	mg/L	0.004	0.09%
QC value within limits for V Recovery = 92.45%								
Zn†	245542.3	4.81	mg/L	0.018	4.81	mg/L	0.018	0.38%
QC value within limits for Zn Recovery = 96.11%								

QC Failed. Continue with analysis.

Sequence No.: 145
Sample ID: ECB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 8/14/2007 03:56:20
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	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	278718.8	108	%	1.3				1.19%
Yr	243192.7	93.3		1.15				1.24%
B_†	608.5	0.0231	mg/L	0.00127	0.0231	mg/L	0.00127	5.48%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	-13.0	-0.00016	mg/L	0.000003	-0.00016	mg/L	0.000003	1.66%
QC value within limits for Ba Recovery = Not calculated								
Be†	-142.7	-0.00004	mg/L	0.000012	-0.00004	mg/L	0.000012	28.19%
QC value within limits for Be Recovery = Not calculated								
Ca†	91.6	0.00930	mg/L	0.004112	0.00930	mg/L	0.004112	44.20%
QC value within limits for Ca Recovery = Not calculated								
Cd†	-4.4	-0.00019	mg/L	0.000032	-0.00019	mg/L	0.000032	17.05%
QC value within limits for Cd Recovery = Not calculated								
Co†	-5.3	-0.00023	mg/L	0.000017	-0.00023	mg/L	0.000017	7.18%
QC value within limits for Co Recovery = Not calculated								
Cr†	3.4	0.00005	mg/L	0.000042	0.00005	mg/L	0.000042	85.57%
QC value within limits for Cr Recovery = Not calculated								
Cu†	-169.4	-0.00040	mg/L	0.000148	-0.00040	mg/L	0.000148	37.41%
QC value within limits for Cu Recovery = Not calculated								
Fe†	0.2	0.00012	mg/L	0.001325	0.00012	mg/L	0.001325	>999.9%
QC value within limits for Fe Recovery = Not calculated								
K†	-72.6	-0.0548	mg/L	0.04848	-0.0548	mg/L	0.04848	88.55%
QC value within limits for K Recovery = Not calculated								
Mg†	0.7	0.00017	mg/L	0.000126	0.00017	mg/L	0.000126	75.86%
QC value within limits for Mg Recovery = Not calculated								
Mo†	31.2	0.00209	mg/L	0.000195	0.00209	mg/L	0.000195	9.32%
QC value within limits for Mo Recovery = Not calculated								
Na†	409.0	0.122	mg/L	0.0083	0.122	mg/L	0.0083	6.87%
QC value within limits for Na Recovery = Not calculated								
Ni†	-12.9	-0.00059	mg/L	0.000061	-0.00059	mg/L	0.000061	10.34%
QC value within limits for Ni Recovery = Not calculated								
Pb†	15.9	0.00298	mg/L	0.000225	0.00298	mg/L	0.000225	7.54%
QC value within limits for Pb Recovery = Not calculated								
Tl†	2.9	0.00098	mg/L	0.001859	0.00098	mg/L	0.001859	189.72%
QC value within limits for Tl Recovery = Not calculated								
V†	-43.3	-0.00027	mg/L	0.000138	-0.00027	mg/L	0.000138	51.96%
QC value within limits for V Recovery = Not calculated								
Zn†	2.4	0.00005	mg/L	0.000190	0.00005	mg/L	0.000190	368.42%
QC value within limits for Zn Recovery = Not calculated								

QC Failed. Retry.

Sequence No.: 146
Sample ID: ECB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 0
Date Collected: 8/14/2007 03:59:57
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	291376.2	113	%	1.3				1.18%
Yr	249001.2	95.5	%	1.68				1.76%
B_†	314.7	0.0119	mg/L	0.00061	0.0119	mg/L	0.00061	5.11%
QC value within limits for B_		Recovery = Not calculated						
Ba†	-6.7	-0.00008	mg/L	0.000016	-0.00008	mg/L	0.000016	19.28%
QC value within limits for Ba		Recovery = Not calculated						
Be†	-47.4	-0.00001	mg/L	0.000012	-0.00001	mg/L	0.000012	79.74%
QC value within limits for Be		Recovery = Not calculated						
Ca†	61.4	0.00623	mg/L	0.003055	0.00623	mg/L	0.003055	49.01%
QC value within limits for Ca		Recovery = Not calculated						
Cd†	-9.2	-0.00040	mg/L	0.000051	-0.00040	mg/L	0.000051	12.81%
QC value within limits for Cd		Recovery = Not calculated						
Co†	-11.7	-0.00052	mg/L	0.000096	-0.00052	mg/L	0.000096	18.47%
QC value within limits for Co		Recovery = Not calculated						
Cr†	-21.9	-0.00031	mg/L	0.000028	-0.00031	mg/L	0.000028	9.03%
QC value within limits for Cr		Recovery = Not calculated						
Cu†	-320.6	-0.00075	mg/L	0.000220	-0.00075	mg/L	0.000220	29.24%
QC value within limits for Cu		Recovery = Not calculated						
Fe†	1.1	0.00061	mg/L	0.000900	0.00061	mg/L	0.000900	146.59%
QC value within limits for Fe		Recovery = Not calculated						
K†	-108.4	-0.0818	mg/L	0.01436	-0.0818	mg/L	0.01436	17.55%
QC value within limits for K		Recovery = Not calculated						
Mg†	0.5	0.00012	mg/L	0.000484	0.00012	mg/L	0.000484	394.78%
QC value within limits for Mg		Recovery = Not calculated						
Mo†	1.3	0.00009	mg/L	0.000012	0.00009	mg/L	0.000012	14.23%
QC value within limits for Mo		Recovery = Not calculated						
Na†	332.9	0.0989	mg/L	0.00988	0.0989	mg/L	0.00988	9.99%
QC value within limits for Na		Recovery = Not calculated						
Ni†	-15.0	-0.00069	mg/L	0.000009	-0.00069	mg/L	0.000009	1.35%
QC value within limits for Ni		Recovery = Not calculated						
Pb†	14.0	0.00262	mg/L	0.001020	0.00262	mg/L	0.001020	38.98%
QC value within limits for Pb		Recovery = Not calculated						
Tl†	2.4	0.00079	mg/L	0.001066	0.00079	mg/L	0.001066	134.14%
QC value within limits for Tl		Recovery = Not calculated						
V†	2.5	0.00001	mg/L	0.000210	0.00001	mg/L	0.000210	>999.9%
QC value within limits for V		Recovery = Not calculated						
Zn†	-22.3	-0.00043	mg/L	0.000018	-0.00043	mg/L	0.000018	4.03%
QC value within limits for Zn		Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 147
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 21
Date Collected: 8/14/2007 04:05:39
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.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	279645.1	108	%	2.4				2.20%
Yr	242734.1	93.1	%	1.64				1.76%
B_†	1386.4	0.0525	mg/L	0.00126	0.0525	mg/L	0.00126	2.40%
QC value within limits for B_	Recovery = 105.06%							
Ba†	1444.3	0.0177	mg/L	0.00030	0.0177	mg/L	0.00030	1.67%
QC value within limits for Ba	Recovery = 88.34%							
Be†	2785.7	0.00085	mg/L	0.000005	0.00085	mg/L	0.000005	0.59%
QC value within limits for Be	Recovery = 84.95%							
Ca†	10103.0	1.03	mg/L	0.006	1.03	mg/L	0.006	0.60%
QC value within limits for Ca	Recovery = 102.59%							
Cd†	169.1	0.00742	mg/L	0.000116	0.00742	mg/L	0.000116	1.56%
QC value within limits for Cd	Recovery = 148.38%							
Co†	1082.6	0.0478	mg/L	0.00035	0.0478	mg/L	0.00035	0.74%
QC value within limits for Co	Recovery = 95.51%							
Cr†	634.8	0.00904	mg/L	0.000145	0.00904	mg/L	0.000145	1.61%
QC value within limits for Cr	Recovery = 90.42%							
Cu†	3380.9	0.00796	mg/L	0.000159	0.00796	mg/L	0.000159	1.99%
QC value within limits for Cu	Recovery = 79.57%							
Fe†	39.5	0.0216	mg/L	0.00081	0.0216	mg/L	0.00081	3.76%
QC value within limits for Fe	Recovery = 108.15%							
K†	1216.7	0.918	mg/L	0.0013	0.918	mg/L	0.0013	0.14%
QC value within limits for K	Recovery = 91.82%							
Mg†	455.3	0.112	mg/L	0.0017	0.112	mg/L	0.0017	1.56%
QC value within limits for Mg	Recovery = 112.06%							
Mo†	256.9	0.0172	mg/L	0.00008	0.0172	mg/L	0.00008	0.48%
QC value within limits for Mo	Recovery = 86.12%							
Na†	3747.3	1.11	mg/L	0.001	1.11	mg/L	0.001	0.08%
QC value within limits for Na	Recovery = 111.35%							
Ni†	404.2	0.0186	mg/L	0.00051	0.0186	mg/L	0.00051	2.78%
QC value within limits for Ni	Recovery = 92.77%							
Pb†	119.7	0.0224	mg/L	0.00019	0.0224	mg/L	0.00019	0.83%
QC value within limits for Pb	Recovery = 111.85%							
Tl†	295.3	0.0991	mg/L	0.00085	0.0991	mg/L	0.00085	0.86%
QC value within limits for Tl	Recovery = 99.12%							
V†	275.4	0.00175	mg/L	0.000170	0.00175	mg/L	0.000170	9.74%
QC value within limits for V	Recovery = 87.27%							
Zn†	791.2	0.0155	mg/L	0.00035	0.0155	mg/L	0.00035	2.29%
QC value within limits for Zn	Recovery = 77.32%							

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 Failed
12	0	ICB	QC Failed
13	0	ICB	QC Failed
14	0	ICB	QC Passed
15	20	MRL	QC Failed
16	20	MRL	QC Failed
17	16	FILTER_CHECK	Analyzed
18	23	MRL6010	Analyzed
19	38	MBLANK	Analyzed
20	39	LCS	Analyzed
21	40	LCSD	Analyzed
22	41	2708020271_2X	Analyzed
23	42	2708020271_2XMS	Analyzed
24	43	2708020271_2XMSD	Analyzed
25	44	2708020272_2X	Analyzed
26	45	2708020272_2XMS	Analyzed
27	4	CCV	QC Passed
28	0	CCB	QC Passed
29	46	2708020272_2XMSD	Analyzed
30	47	2708020256_20X	Analyzed
31	48	2708020257_20X	Analyzed
32	49	2708020258_20X	Analyzed
33	50	2708020259_20X	Analyzed
34	51	2708020260_20X	Analyzed
35	52	2708020261_20X	Analyzed
36	53	2708020262_20X	Analyzed
37	54	2708020263_20X	Analyzed
38	55	2708020264_20X	Analyzed
39	4	CCV	QC Passed
40	0	CCB	QC Passed
41	5	MCV	QC Passed
42	56	2708020265_10X	Analyzed
43	57	2708020266_10X	Analyzed
44	58	2708020267_5X	Analyzed
45	59	2708020268_2X	Analyzed
46	60	2708020269_2X	Analyzed
47	61	2708020270_2X	Analyzed
48	62	2708020317_2X	Analyzed
49	63	2708020319_5X	Analyzed
50	64	2708020318_2X	Analyzed
51	65	MBLANK	Analyzed
52	4	CCV	QC Passed
53	0	CCB	QC Failed
54	0	CCB	QC Passed
55	66	LCS	Analyzed
56	67	LCSD	Analyzed
57	68	2708020327_2X	Analyzed
58	69	2708020327_2XMS	Analyzed
59	70	2708020327_2XMSD	Analyzed
60	71	2708020332_20X	Analyzed
61	72	2708020332_20XMS	Analyzed
62	73	2708020332_20XMSD	Analyzed
63	74	2708020320_20X	Analyzed
64	75	2708020321_20X	Analyzed
65	4	CCV	QC Passed
66	0	CCB	QC Passed
67	5	MCV	QC Failed

68	5	MCV	QC Failed
69	76	2708020322_10X	Analyzed
70	77	2708020323_2X	Analyzed
71	78	2708020324_5X	Analyzed
72	79	2708020325_2X	Analyzed
73	80	2708020326_2X	Analyzed
74	81	2708020328_2X	Analyzed
75	82	2708020329_5X	Analyzed
76	83	2708020330_5X	Analyzed
77	84	2708020331_20X	Analyzed
78	85	2708020342_10X	Analyzed
79	4	CCV	QC Failed
80	4	CCV	QC Passed
81	0	CCB	QC Failed
82	0	CCB	QC Failed
83	0	CCB	QC Passed
84	86	2708020343_2X	Analyzed
85	87	2708020344_5X	Analyzed
86	88	2708030224_2X	Analyzed
87	89	2708030225_2X	Analyzed
88	90	2708030226_2X	Analyzed
89	91	2708030227_2X	Analyzed
90	92	MBLANK	Analyzed
91	93	LCS	Analyzed
92	94	LCSD	Analyzed
93	95	2708040004_5X	Analyzed
94	4	CCV	QC Failed
95	4	CCV	QC Failed
96	4	CCV	QC Failed
97	0	CCB	QC Failed
98	0	CCB	QC Failed
99	0	CCB	QC Passed
100	5	MCV	QC Failed
101	5	MCV	QC Failed
102	96	2708040004_5XMS	Analyzed
103	97	2708040004_5XMSD	Analyzed
104	98	2708040006_20X	Analyzed
105	99	2708040006_20XMS	Analyzed
106	100	2708040006_20XMSD	Analyzed
107	101	2708030228_2X	Analyzed
108	102	2708030229_2X	Analyzed
109	103	2708030230_2X	Analyzed
110	104	2708030231_2X	Analyzed
111	105	2708030232_2X	Analyzed
112	4	CCV	QC Failed
113	4	CCV	QC Failed
114	4	CCV	QC Failed
115	0	CCB	QC Failed
116	0	CCB	QC Passed
117	106	2708030233_20X	Analyzed
118	107	2708030234_2X	Analyzed
119	108	2708030235_2X	Analyzed
120	109	2708030239_5X	Analyzed
121	110	2708040001_2X	Analyzed
122	111	2708040002_2X	Analyzed
123	112	2708040003_5X	Analyzed
124	113	2708040005_5X	Analyzed
125	114	2708040007_20X	Analyzed
126	115	2708040008_20X	Analyzed
127	4	CCV	QC Failed
128	4	CCV	QC Failed
129	4	CCV	QC Failed
130	0	CCB	QC Failed
131	0	CCB	QC Failed
132	0	CCB	QC Passed
133	5	MCV	QC Failed
134	5	MCV	QC Failed
135	116	2708040009_20X	Analyzed
136	117	2708040010_2X	Analyzed
137	118	2708040011_2X	Analyzed
138	10	ICSA	QC Passed

139	11	ICSAB	QC Failed
140	0	Wash	QC Passed
141	12	QC-25 1ppm	QC Failed
142	12	QC-25 1ppm	QC Failed
143	4	ECV	QC Failed
144	4	ECV	QC Failed
145	0	ECB	QC Failed
146	0	ECB	QC Passed
147	21	MRL	QC Passed

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	ME0704023	(05/01/08) ✓	1:10 ME0704027	
(Prepare daily)	ME0704024	(05/01/08) ✓	1:10	
			CCV/ECV	MCV
CCV/MCV/ECV	ME0610005	(04/10/08) ✓	1:20 ME0610006	1:40 ME0610007
(Prepare daily)				
Spike/LCS	ME0606004	(12/13/07) ✓	1:100 ME0601006	
(Prepare daily)	ME0705006	(10/01/07) ✓	1:100	
	ME0704005	(10/04/08) ✓	1:200	
MRL	ME0703010	(09/16/07) ✓	1:100 ME0603015	
(Prepare daily)				
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	ME0708004	(02/07/08) ✓		
CCV/ECV	ME0703007	(09/16/07) ✓		
Spike/LCS	ME0703006	(09/16/07) ✓	1:100	
(Prepare daily)				
MRL	ME0708005	(02/07/08) ✓	1:100	
(Prepare daily)				
Method Li				
Std/ICV/MRL	ME0703008	(09/16/07) ✓	1:1000, 200, 40, 10	
(Prepare daily)				
LCS/Spike	ME0707002	(01/10/08) ✓	1:50	
(Prepare daily)				
ccv	ME0707001	(10/31/07) ✓	1:40	
(Prepare daily)				

From May 2005: the calibration std for ICP should be ME0505010,011 not ME0408010
dilution should be 1:20 and 1:40 not 1:200 and 1:400. 1/10/2006.
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:	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
1316 Lehigh Avenue, Suite 4
Lakewood, New Jersey 08701 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 732.901.1900
fax: 732.901.1903
info@inorganicventures.com

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."

2.0 **DESCRIPTION OF CRM** Custom Solution

M80704023

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 ± 5 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)

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.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Al	ICP Assay	3101a	010808
As	ICP Assay	3103a	010713
Ba	Gravimetric		See Sec. 4.2
Be	Gravimetric		See Sec. 4.2
Ca	EDTA	928	928
Cd	EDTA	928	928
Co	ICP Assay	3113	00630
Cr3	ICP Assay	3112a	990607
Cu	EDTA	928	928
Fe	ICP Assay	3126a	000606
K	ICP Assay	3141a	891312
Mg	EDTA	928	928
Mn	EDTA	928	928
Na	ICP Assay	3152a	990907
Ni	EDTA	928	928
Pb	ICP Assay	3128	030721
Se	ICP Assay	3149	992106
Sr	ICP Assay	3153a	990906
Tl	Gravimetric		See Sec. 4.2
V	ICP Assay	3165	992706
Zn	EDTA	928	928

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	Volhard	999a	999a
Al	EDTA	928	928
As	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	992907
Be	ICP Assay	3105a	892707
Ca	ICP Assay	3109a	000622
Cd	ICP Assay	3108	890312
Co	EDTA	928	928
Cr3	Gravimetric		See Sec. 4.2
Cu	ICP Assay	3114	891811
Fe	EDTA	928	928
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	991107
Mn	ICP Assay	3132	890903
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	000612
Pb	EDTA	928	928
Se	Gravimetric		See Sec. 4.2
Sr	EDTA	928	928
Tl	ICP Assay	3158	993012
V	EDTA	928	928
Zn	ICP Assay	3168a	001402

4.2 **BALANCE CALIBRATION** - All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST). The NIST Traceability numbers are 692476 - Class 1 and 692476A - Class 2. The NIST test number is 822/260017-98. All analytical balances are calibrated every 4 months. The balances are calibrated with a class 1 and/or class 2 analytical weight set. These weights are tested annually by a NIST / NVLAP accredited calibration lab. The NIST test number is

4.3 **THERMOMETER CALIBRATION** - The thermometers used in the determination of the final densities are calibrated vs standard thermometer No. 903-2680 which was certified in accordance with the procedures outlined by ASTM E77-87 and NIST Monograph 150 using NIST Test Nos. and Std Nos.: 769543, 217368/769543, 217368/P14452, 176240/P14452, 176240.Thermometers which are not calibrated vs standard thermometer No. 903-2680 are traceable to NIST Identification

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A Glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
ICP-MS, ICP-OES, FAAS, GFAA, XRF, and DCP
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to in-house procedure IV-MPM-004 and is guaranteed to be homogeneous.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 **ISO 9001:2000 Quality Management System Registration - QMI Certificate Number 010105**
Recognized by:
Registrar Accreditation Board (ANSI-RAB)
Standards Council of Canada (SCC)
Dutch Council for Accreditation (RVA)
Entidad Mexicana de Acreditacion, a.c.(EMA)
Members of IQ Net International Certification Network:
Argentina (IRAM), Australia (QAS), Austria (ÖQS), Belgium (Avinter) , Brazil (FCAV), Canada (QMI), Hong Kong (HKQAA), Columbia (ICONTEC), Czech Republic (CQS), Denmark (DS), Finland (SFS), France (AFAQ), Germany (DQS), Greece (ELOT), Hungary (MSZT), Ireland (NSAI), Israel (SII), Italy (CISQ), Japan (JQA), Korea (KSA-QA), Netherlands (KEMA), Norway (NCS), Poland(PCBC), Portugal (APCER), Singapore (PSB), Slovenia (SIQ), Spain (AENOR), Switzerland (SQS)

10.2 **ISO/IEC 17025 - 1999 "General Requirements for the Competence of Testing and Calibration"**
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 **ISO/IEC Guide 34 - 2000 "General Requirements for the Competence of Reference Material Producers"**
- Reference Materials Production - Accredited A2LA Certificate Number 883.02
A2LA Mutual Recognition Agreement Partners:
Australia (NATA), Austria (BmwA), Belgium (BELTEST) (BKO-OBE), Canada (SCC), Chinese Taipei (CNLA), Czech Republic (NAO), Denmark (DANAK), Finland (FINAS), France (COFRAC), Germany (DAR), Hong Kong (HKAS, Ireland (NAB), Italy (SIT) (SINAL), Japan (JAB) (JNLA), Republic of Korea (KOLAS), The Netherlands (RvA), New Zealand (IANZ), Norway (NA), Portugal (IPQ), Singapore (SAC-SINGLAS), Spain (ENAC), Sweden (SWEDAC), Switzerland (SAS), United Kingdom (UKAS) and United States (NVLAP) (ICBO ES)

10.4 **10CFR50 Appendix B - Nuclear Regulatory Commission** - Domestic Licensing of Production and Utilization Facilities

10.5 **10CFR21 - Nuclear Regulatory Commission** - Reporting Defects and Non-Compliance

10.6 MIL-STD-45662A (Obsolete/Observed)

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special environmental controls that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

Certification Date: April 16, 2007
Expiration Date:

EXPIRES
1/2008

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Nick Maida, Product Documentation Administrator

Certificate Approved By: Katalin Le, QC Manager

Certifying Officer: Paul Gaines, PhD., Senior Technical Director

ME0704024

Intial: WBH
Date: 4/23/07

METALS STANDARD DOCUMENTATION

Standard:	ICPCalibration Stock Std #2	**ME #:**	0704024
Date Received/Prepped:	4/23/2007	**By:**	wbh
Date Expired:	5/1/2008	**Lot #:**	A2-MEB235011
Manufacturer:	Inorganic Ventures	**Certificate:**	Y
Matrix:	5% Nitric Acid + Trace HF	**NIST SRM:**	Varies
Amount:	500 mL	**Storage:**	Room Temp

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

INORGANIC VENTURES™
1995 Lehigh Avenue, Suite 4
Lakewood, New Jersey 08701 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 732.901.1900
fax: 732.901.1909
info@inorganicventures.com

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.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001:2000 Quality Management System Registration - QMI Certificate Number 010105
Recognized by:
Registrar Accreditation Board (ANSI-RAB)
Standards Council of Canada (SCC)
Dutch Council for Accreditation (RVA)
Entidad Mexicana de Acreditacion, a.c.(EMA)
Members of IQ Net International Certification Network:
Argentina (IRAM), Australia (QAS), Austria (ÖQS), Belgium (Avinter) , Brazil (FCAV), Canada (QMI), Hong Kong (HKQAA), Columbia (ICONTEC), Czech Republic (CQS), Denmark (DS), Finland (SFS), France (AFAQ), Germany (DQS), Greece (ELOT), Hungary (MSZT), Ireland (NSAI), Israel (SII), Italy (CISQ), Japan (JQA), Korea (KSA-QA), Netherlands (KEMA), Norway (NCS), Poland(PCBC), Portugal (APCER), Singapore (PSB), Slovenia (SIQ), Spain (AENOR), Switzerland (SQS)

10.2 ISO/IEC 17025 - 1999 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 - 2000 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02
A2LA Mutual Recognition Agreement Partners:
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10.4 10CFR50 Appendix B - Nuclear Regulatory Commission - Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission - Reporting Defects and Non-Compliance

10.6 MIL-STD-45662A (Obsolete/Observed)

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special environmental controls that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

Certification Date: April 16, 2007
Expiration Date:

EXPIRES
1 9 2008

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Nick Maida, Product Documentation Administrator

Certificate Approved By: Katalin Le, QC Manager

Certifying Officer: Paul Gaines, PhD., Senior Technical Director

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	991907
Mo	Gravimetric		See Sec. 4.2
Sb	ICP Assay	3102a	990707
Sn	ICP Assay	3161a	993107
Ti	Gravimetric		See Sec. 4.2

ELEMENT	METHOD	NIST SRM#	SRM LOT#
B	Gravimetric		See Sec. 4.2
Mo	ICP Assay	3134	891307
Sb	Gravimetric		See Sec. 4.2
Sn	Gravimetric		See Sec. 4.2
Ti	ICP Assay	3162a	992801

4.2 **BALANCE CALIBRATION** - All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST). The NIST Traceability numbers are 692476 - Class 1 and 692476A - Class 2. The NIST test number is 822/260017-98. All analytical balances are calibrated every 4 months. The balances are calibrated with a class 1 and/or class 2 analytical weight set. These weights are tested annually by a NIST / NVLAP accredited calibration lab. The NIST test number is

4.3 **THERMOMETER CALIBRATION** - The thermometers used in the determination of the final densities are calibrated vs standard thermometer No. 903-2680 which was certified in accordance with the procedures outlined by ASTM E77-87 and NIST Monograph 150 using NIST Test Nos. and Std Nos.: 769543, 217368/769543, 217368/P14452, 176240/P14452, 176240.Thermometers which are not calibrated vs standard thermometer No. 903-2680 are traceable to NIST Identification

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A Glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
ICP-MS, ICP-OES, FAAS, GFAA, XRF, and DCP
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to in-house procedure IV-MPM-004 and is guaranteed to be homogeneous.

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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Santa Rosa, CA 95403 800.878.7654
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Innovative Solutions in Analytical Science and Technology

Expiry: 4/10/2008

Certificate of Analysis

M70610005

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.

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.

METALS STANDARD DOCUMENTATION

CWS
6/19/06

Standard:	ICP/ICPMS LCS/SPIKE Solution	**ME #:**	0606004
Date Received/Prepped:	6/19/2006	**By:**	wbh
Date Expired:	12/13/2006	**Lot #:**	06F103
Manufacturer:	CPI	**Certificate:**	Y
Matrix:	5% HNO3 + 0.1% HF	**NIST SRM:**	3100 Series
Amount:	10 x 100 mL	**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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Innovative Solutions in Analytical Science and Technology

Expiry: 12/13/2007

Certificate of Analysis

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

M70606004

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	**ME #:**	0705006
Date Received/Prepped:	5/9/2007	**By:**	WBH
Date Expired:	10/1/2007	**Lot #:**	
Manufacturer:	MWH-WBH	**Certificate:**	Y
Matrix:	2% HNO3	**NIST SRM:**	3100 SERIES
Amount:	100mL x 2	**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
195 Lehigh Avenue, Suite 4
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inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 732.901.1900
fax: 732.901.1903
info@inorganicventures.com

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."

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

M70611005

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 $(\bar{x}) = \frac{\Sigma x1}{n}$

$(\bar{x})$ = mean
x1 = individual results
n = number of measurements

Uncertainty $(\pm) = \frac{2[(\Sigma s1)2]^{1/2}}{(n)^{1/2}}$

$\Sigma s1$ = 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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.9216; mix of +3 and +5; 6; H3AsO4 and HAsO2

Chemical Compatibility -Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - As0 (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphoric form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (One gram of powered sample is fused in a Ni0 crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of the sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni0 crucible. The fuseate is extracted with water and acidified with HNO3)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES189.042 nm	0.05 / 0.005 µg/mL	1	atom	Cr
ICP-OES193.696 nm	0.1 / 0.01 µg/mL	1	atom	V, Ge
ICP-OES 228.812 nm	0.1 / 0.01 µg/mL	1	atom	Cd, Pt, Ir, Co
ICP-MS 75 amu	20 ppt	n/a	M+	40Ar35Cl, 59Co16O, 36Ar38Ar1H, 38Ar37Cl, 6Ar39K, 150Nd2+,150Sm2+

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to procedure IV-MPM-004 and is guaranteed to be homogeneous.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001:2000 Quality Management System Registration - QMI Certificate Number 010105
Recognized by:
Registrar Accreditation Board (ANSI-RAB)
Standards Council of Canada (SCC)
Dutch Council for Accreditation (RVA)
Entidad Mexicana de Acreditacion, a.c.(EMA)
Members of IQ Net International Certification Network:
Argentina (IRAM), Australia (QAS), Austria (ÖQS), Belgium (Avinter) , Brazil (FCAV), Canada (QMI), Hong Kong (HKQAA), Columbia (ICONTEC), Czech Republic (CQS), Denmark (DS), Finland (SFS), France (AFAQ), Germany (DQS), Greece (ELOT), Hungary (MSZT), Ireland (NSAI), Israel (SII), Italy (CISQ), Japan (JQA), Korea (KSA-QA), Netherlands (KEMA), Norway (NCS), Poland(PCBC), Portugal (APCER), Singapore (PSB), Slovenia (SiQ), Spain (AENOR), Switzerland (SQS)

10.2 ISO/IEC 17025 - 1999 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 - 2000 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02
A2LA Mutual Recognition Agreement Partners:
Australia (NATA), Austria (BmwA), Belgium (BELTEST) (BKO-OBE), Canada (SCC), Chinese Taipei (CNLA), Czech Republic (NAO), Denmark (DANAK), Finland (FINAS), France (COFRAC), Germany (DAR), Hong Kong (HKAS, Ireland (NAB), Italy (SIT) (SINAL), Japan (JAB) (JNLA), Republic of Korea (KOLAS), The Netherlands (RvA), New Zealand (IANZ), Norway (NA), Portugal (IPQ), Singapore (SAC-SINGLAS), Spain (ENAC), Sweden (SWEDAC), Switzerland (SAS), United Kingdom (UKAS) and United States (NVLAP) (ICBO ES)

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission - Reporting Defects and Non-Compliance

10.6 MIL-STD-45662A (Obsolete/Observed)

4.2 **BALANCE CALIBRATION** - All balances are checked daily using in-house procedure number 6-IMM001. The weights used for testing are annually compared to Gerhart Scale Corporation's master weights and are traceable to the National Institute of Standards and Technology (NIST). The NIST Traceability numbers are 692476 - Class 1 and 692476A - Class 2. The NIST test number is 822/260017-98. All analytical balances are calibrated every 4 months by Gerhart Scale Corp. of South Amboy. The balances are calibrated with a class 1 and/or class 2 analytical weight set. These weights are tested annually by a NIST / NVLAP accredited calibration lab. The NIST test number is 822/260017-98.

4.3 **THERMOMETER CALIBRATION** - The thermometers used in the determination of the final densities are calibrated vs standard thermometer No. 903-2680 which was certified in accordance with the procedures outlined by ASTM E77-87 and NIST Monograph 150 using NIST Test Nos. and Std Nos.: 769543, 217368/769543, 217368/P14452, 176240/P14452, 176240. The in-house procedure No. is 2-QC-001.Thermometers which are not calibrated vs standard thermometer No. 903-2680 are traceable to NIST Identification Nos. 92564, 119016, 471047 and NIST test report Nos. 811/258522, 811/2557078, and 236090.

4.4 **GLASSWARE CALIBRATION** - In-house procedure 3-QC-002 is used to calibrate all Class A glassware used in the manufacture and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP/MS AND ICP-OES IN µg/mL

CRM's solutions are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Al	0.00038	M	Dy	< 0.01884	O	Li	< 0.00002	M	Pr	< 0.00094	M	Te	< 0.09418
O	Sb	< 0.01000	M	Er	< 0.01570	M	Lu	< 0.00126	O	Re	< 0.01000	M	Tb	< 0.00094
s	As		M	Eu	< 0.00942	O	Mg	0.00017	M	Rh	< 0.00314	M	Tl	< 0.00314
M	Ba	< 0.03139	M	Gd	< 0.00314	O	Mn	0.00005	M	Rb	< 0.00314	M	Th	< 0.00314
M	Be	< 0.00157	M	Ga	< 0.00314	O	Hg	< 0.01200	M	Ru	< 0.00628	M	Tm	< 0.00126
M	Bi	< 0.00126	M	Ge	< 0.01884	M	Mo	< 0.00628	M	Sm	< 0.00314	O	Sn	0.00073
O	B	< 0.01200	M	Au	< 0.00942	M	Nd	< 0.00628	M	Sc	< 0.03139	M	Ti	< 0.15697
M	Cd	< 0.00942	M	Hf	< 0.00628	O	Ni	< 0.00200	M	Se	< 0.02511	M	W	< 0.03139
O	Ca	0.00206	M	Ho	< 0.00157	O	Nb	< 0.00200	O	Si	0.00476	M	U	< 0.00628
M	Ce	< 0.01570	M	In	< 0.03139	n	Os		M	Ag	< 0.00628	M	V	< 0.00628
M	Cs	< 0.00094	M	Ir	< 0.01570	M	Pd	< 0.01570	O	Na	0.00159	M	Yb	< 0.00314
M	Cr	< 0.01570	O	Fe	< 0.00110	O	P	< 0.00260	M	Sr	< 0.00157	M	Y	< 0.12558
M	Co	< 0.00942	M	La	< 0.00157	M	Pt	< 0.00628	O	S	< 0.02500	O	Zn	0.00044
M	Cu	< 0.01884	M	Pb	< 0.00942	O	K	0.00048	M	Ta	< 0.02198	M	Zr	< 0.01570

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
ICP-MS, ICP-OES, FAAS, GFAA, XRF, and DCP
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact IV Technical Staff

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 IV Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies (P-SP01020) of chemically-stable solutions performed at Inorganic Ventures Labs indicate a CRM shelf-life of four years for solutions packaged in 500-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Inorganic Ventures Labs concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

Certification Date: September 15, 2005

Expiration Date: EXPIRES 1 9 2007

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Nick Maida, QA Administrator

Certificate Approved By: Katalin Le, QC Manager

Certifying Officer: Paul Gaines, PhD., Technical Director

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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The Netherlands www.cpiinternational.com

CERTIFICATE OF ANALYSIS

P/N S4400-1000281
P/N 4400-1000281

120704013

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: WJH
Date: 3/5/07

METALS STANDARD DOCUMENTATION

Standard:	Selenium Stock Standard
Date Received/Prepped:	3/5/2007
Date Expired:	8/22/2008
Manufacturer:	CPI
Matrix:	2% HNO3
Amount:	100 mL

ME #:	0703001
By:	wbh
Lot #:	6.00E+228
Certificate:	Y
NIST SRM:	3148
Storage:	Room Temp

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

CPI INTERNATIONAL

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Innovative Solutions in Analytical Science and Technology

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CERTIFICATE OF ANALYSIS

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

MZ070800 1

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: 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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Innovative Solutions in Analytical Science and Technology

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: wbh
Date: 4/10/07

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

MZ0704005

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
Date Received/Prepped: 3/16/2007
Date Expired: 9/16/2007
Manufacturer: MWH-WBH
Matrix: 5% HNO3
Amount: 2X100 mL

ME #: 0703010
By: WBH
Lot #:
Certificate:
NIST SRM:
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
Date Received/Prepped: 9/25/2006
Date Expired: 9/20/2007
Manufacturer: CPI
Matrix: 2% HNO3 + tr HF
Amount: 100 mL

ME #: 0609001
By: WBH
Lot #: 06I162
Certificate: Yes
NIST SRM: 3100 series
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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M7060901

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.

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: 5/16/07

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: 3/2/06

METALS STANDARD DOCUMENTATION

Standard: ICP ICSA Stock solution
Date Received/Prepped: 3/2/2006
Date Expired: 8/23/2007
Manufacturer: CPI
Matrix: 5% HNO3
Amount: 500mL

ME #: 0603001
By: WBH
Lot #: 06A078
Certificate: Y
NIST SRM: varius
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

M-060301

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: 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	~~25~~mL ME0603002/500mL	0.5 ppm
Ba	2.5mL.	0.25 ppm
Be	⊖ 5/16/07	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:	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

M60603-01

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: WBH
Date: 3/2/06

METALS STANDARD DOCUMENTATION

Standard: ICSB Stock Solution
Date Received/Prepped: 3/2/2006
Date Expired: 8/23/2007
Manufacturer: CPI
Matrix: 5% HNO3
Amount: 100 mL

ME #: 0603002
By: WBH
Lot #: 04L149
Certificate: Y
NIST SRM: 3100 series
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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MT06-3002

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: DYH
Date: 5/9/07

METALS STANDARD DOCUMENTATION

Standard:	ICP QC-25 1PPM	**ME #:**	0705005
Date Received/Prepped:	5/9/2007	**By:**	DYH
Date Expired:	11/9/2007	**Lot #:**	VARIOUS
Manufacturer:	MWH-DYH	**Certificate:**	
Matrix:	5% HNO3	**NIST SRM:**	
Amount:	500 mL	**Storage:**	Room Temp

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

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.

Julie M. MacIntosh
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.

Crescent Chemical Co, Inc., 2 Oval Drive, Islandia, NY 11749
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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.

Julie M. MacIntosh
QA Manager

EXPIRES: August 2007

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Intial: WBH
Date: 5/5/07

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
Cd	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

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: UBJ
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

M20702003

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
Al	1.5	0.1
Sb	ND	0.1
As	ND	6
Ba	0.13	0.1
Be	ND	0.1
Bi	ND	0.1
B	ND	4
Br	ND	10
Cd	ND	0.1
Ca	120	7
Ce	ND	0.1
Cs	ND	0.1
Cr	ND	1
Co	ND	0.1

	ppb	DL
Cu	0.45	0.1
Dy	ND	0.1
Er	ND	0.1
Eu	ND	0.1
Gd	ND	0.1
Ga	ND	0.1
Ge	ND	0.1
Au	ND	0.1
Hf	ND	0.1
Ho	ND	0.1
I	ND	0.2
Ir	ND	0.1
Fe	ND	30
La	ND	0.1

	ppb	DL
Pb	ND	0.1
Li	ND	0.4
Lu	ND	1
Mg	2.3	0.2
Mn	ND	1
Hg	ND	0.2
Mo	ND	0.1
Nd	ND	0.1
Ni	0.4	0.1
Nb	ND	0.1
Os	ND	0.1
Pd	ND	0.1
P	18	10
Pt	ND	0.1

	ppb	DL
K	ND	70
Pr	ND	0.1
Re	ND	0.1
Rh	ND	0.1
Rb	ND	0.1
Ru	ND	0.1
Sm	ND	0.1
Se	ND	6
Si	50	8
Ag	ND	0.1
Na	X	1
Sr	1	0.1
Ta	ND	0.1
Te	ND	0.1

	ppb	DL
Tl	ND	0.1
Th	ND	0.1
Tm	ND	0.1
Sn	ND	0.1
Ti	ND	0.1
W	ND	0.1
U	ND	0.1
V	ND	1
Yb	ND	0.1
Y	ND	0.1
Zn	2.9	2
Zr	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

CPI International

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CERTIFICATE OF ANALYSIS

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

1707026O2

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

CPI INTERNATIONAL

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JUL 19 '08

ME070108

CERTIFICATE OF ANALYSIS

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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TITLE ~~#~~ 167 Project No. _____ Book No. _____

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LOG #	CLIENT	SX-ID	MIX	VOLUME	COMMENTS
	200.7	~~JR~~	08-08-07		HNO_3 R# 100411 → (1ml)
BLANK	DIGEST				HCl R# 100412 → (2.5ml)
LCS					LCS/SPIKE
LCSD					ME 0606004
2708020327	KERRMCGEEMP	I-K	AQ	50ml → 50ml	ME 0705006 → (0.5ml)
MS					ME 0704005 → (0.25ml)
MSD					
2708020332		I-V			
MS					
MSD					
2708020320		M-50			
0321		M-34			
0322		M-35			
0323		M-19			
0324		M-39			
0325		M-68			
0326		M-1			
0328		I-J			
0329		I-2			
0330		M-6.7			
0331		I-I			
0342		M-12A			
0343		EB-2			
0344		MD-2			
2708030224		M-87			
0225		M-74			
0226		M-73			
0227		M-88			
	200.7 DIGEST	08-08-07	08-08-07	JR	

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Witnessed & Understood by me. | Date | Invented by | Date

Recorded by

Project No._____

Book No._____ TITLE _____ # LC4

From Page No.___

LOG #	CLIENT	SX - ID	MIK	VOLUME	COMMENTS
	200.7	SRP	08-08-07		HNO_3 R# 100411 (1ml)
BLANK	DIGEST				HCl R# 100412 (2.5ml)
LCS					LCS/SPIKE
LCSD					ME 0606004
2708040004	KERRMCGEE-MP	M-71	AQ	50ml → 50ml	ME 0705006 → (0.5ml)
MS					ME 0704005 → (0.250ml)
MSD					
2708040006		M-22A			
MS					
MSD					
2708030228		M-102			
0229		M-101			
0230		M-86			
0231		M-84			
0232		M-100			
0233		M-36			
0234		M-11			
0235		M-10			
0239		GW-11			
2708040001		M-85			
0002		M-83			
0003		M-70			
0005		M-72			
0007		M-38			
0008		M-89			
0009		M-17A			
0010		M-115			
0011		M-14A			
	200.7 DIGEST	SRP	08-08-07		

To Page No.____

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		Recorded by	