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Level IV Data Package

MWH Group 203332

Method: SW 846 6010B Cr

Sample No.:

2705020837
2705020838
2705020839
2705020840
2705020841
2705020842
2705020843
2705020844
2705020845
2705020846
2705020847
2705020848
2705020849
2705020850
2705020851
2705020852
2705020853
2705020854
2705020855
2705020856
2705020857
2705020858
2705020859
2705020860
2705020861
2705020862
2705020863
2705020864

EPA 200.7/6010B QC Check List

Analyst WBN Analysis Date 5/8/07 Reviewer/Date M 22 May 07

Instrument PerKin Elmer Optima 4300DV

- All sample analyzed within 6 month holding time
- All sample raw concentration 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

NA QIR needed for failed QC

Special Det Code noted on the cover sheet Cr 6010

NA 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 04/23/07

Int: WBN
Date: 5/8/07

Method 200.7/6010

ICP SUMMARY SHEET

File ID: 070508a
Date Started: 5/8/07
Analyst ID: wbh

SAMPLE ID

LINEARITY	(18:54)	Wash	(19:06)	WASH	(19:25)
2705020861	(19:42)	2705030181	(19:52)	2705020857	(20:10)
2705020858	(20:15)	2705020859	(20:19)	2705020860_5	(20:23)
2705020862	(20:28)	2705020863	(20:32)	2705020864	(20:37)
2705030127	(20:41)	2705030133	(20:45)	2705030134	(21:00)
2705030135	(21:04)	2705030175_5	(21:09)	2705030177	(21:13)
2705030178_5	(21:17)	2705030179_1	(21:22)	2705030180	(21:26)
2705030182_5	(21:31)	2705030183	(21:35)	2705020848	(21:54)
2705020851	(22:06)	2705020837_2	(22:18)	2705020838_1	(22:22)
2705020839_1	(22:36)	2705020840_1	(22:40)	2705020841_1	(22:45)
2705020842_1	(22:49)	2705020843_5	(22:54)	2705020844_5	(22:58)
2705020845_5	(23:02)	2705020846	(23:07)	2705020847	(23:11)
2705020849	(23:16)	2705020850	(23:27)	2705020852	(23:31)
2705020853	(23:36)	27050209854	(23:40)	2705020855	(23:44)
2705020856	(23:49)	2705030184	(0:02)	2705040334	(0:22)
2705030203_5	(0:34)	2705030204	(0:38)	2705030205	(0:43)
2705030206	(0:47)	2705030207	(0:51)	2705030208	(1:03)
2705030211	(1:07)	2705030217	(1:11)	2705030218	(1:16)
2705030219	(1:20)	2705030220	(1:23)	2705040313	(1:27)
2705040314	(1:31)	2705040316	(1:35)	2705040327	(1:39)
2705040328	(1:53)	2705040330	(1:58)	2705040331	(2:02)
Wash	(2:14)				

COMMENT:

Cr6010, Fe-6 Tebols, Mn6010

Analyst: WBN

Approved By: M 22 May 07

BATCH NUMBER for 070508a

Amey B...
5/8/07

Test Parameter:

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

Batch ID: 2705020861

2705020861	2705030181	2705020857
2705020858	2705020859	2705020860_5X
2705020862	2705020863	2705020864
2705030127	2705030133	2705030134
2705030135	2705030175_5X	2705030177
2705030178_5X	2705030179_10X	2705030180
2705030182	2705030183	

Batch ID: 2705020848

2705020848	2705020851	2705020837_20X
2705020838_10X	2705020839_10X	2705020840_10X
2705020841_10X	2705020842_10X	2705020843_5X
2705020844_5X	2705020845_5X	2705020846
2705020847	2705020849	2705020850
2705020852	2705020853	27050209854_5X
2705020855	2705020856	

Batch ID: 2705030184

2705030184	2705040334	2705030203_5X
2705030204	2705030205	2705030206
2705030207	2705030208	2705030211
2705030217	2705030218	2705030219
2705030220	2705040313	2705040314
2705040316	2705040327	2705040328
2705040330	2705040331	

Analysis
CR
in 5/8/07

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
ICV	5/8/07	18:51	1	9.8864	9.89 ✓	95-105	98.8%
LINEARITY	5/8/07	18:54	1	0.0018	.0018		
ICSA	5/8/07	18:58	1	-0.0006	ND	80-120	
ICSAB	5/8/07	19:02	1	.25106	.251	80-120	100%
Wash	5/8/07	19:06	1	-0.0002	ND		
QC-25 1ppm	5/8/07	19:09	1	.99868	1.0		
CCV	5/8/07	19:14	1	5.0310	5.03	90-110	100%
ICB	5/8/07	19:18	1	-0.0002	ND		
MRL	5/8/07	19:21	1	0.0095	.0095	50-150	95.3%
WASH	5/8/07	19:25	1	-0.0003	ND		
MRL6010	5/8/07	19:29	1	0.0098	.0098 ✓		
MBLANK6010	5/8/07	19:32	1	-0.0003	ND		
LCS	5/8/07	19:36	1	.98454	.985 ✓	85-115	98.4%
LCSD	5/8/07	19:39	1	.97218	.972 ✓	85-115	97.2%
2705020861 ✓	5/8/07	19:42	2	0.0003	0.0002 ✓		
2705020861MS	5/8/07	19:45	2	.94292	.943 ✓	[0.943]	47.1 (74.3)
2705020861MSD	5/8/07	19:48	2	.96027	.96 ✓	[0.960]	48.0 (36.0)
2705020861T	5/8/07	19:48	2		2.00 ✓	70 - 130	
2705030181	5/8/07	19:52	2	.34059	.340 ✓		
2705030181MS	5/8/07	19:56	2	1.3137	1.31	[0.973]	48.6 (77.5)
CCV	5/8/07	20:00	1	5.1709	5.17	90-110	103%
CCB	5/8/07	20:03	1	-0.0000	ND		
2705030181MSD	5/8/07	20:06	2	1.2697	1.27	[0.929]	46.4 (92.9)
2705030181T	5/8/07	20:06	2		2.00	70 - 130	
2705020857 ✓	5/8/07	20:10	2	0.0907	.091 ✓		
2705020858 ✓	5/8/07	20:15	2	1.0944	1.1 ✓		
2705020859 ✓	5/8/07	20:19	2	0.0812	.081 ✓		
2705020860_5X ✓	5/8/07	20:23	5	12.122	12 ✓		
2705020862 ✓	5/8/07	20:28	2	.71508	.720 ✓		
2705020863 ✓	5/8/07	20:32	2	0.0807	.081 ✓		
2705020864 ✓	5/8/07	20:37	2	0.0319	.032 ✓		
2705030127	5/8/07	20:41	2	-0.0003	ND ✓		
2705030133	5/8/07	20:45	2	0.0001	0.0000 ✓		
CCV	5/8/07	20:50	1	5.0941	5.09	90-110	101%
CCB	5/8/07	20:53	1	-0.0001	ND		
MCV	5/8/07	20:57	1	2.5174	2.52	90-110	100%
2705030134	5/8/07	21:00	2	0.0005	0.0005 ✓		
2705030135	5/8/07	21:04	2	0.0009	0.0009 ✓		
2705030175_5X	5/8/07	21:09	5	12.688	13 ✓		
2705030177	5/8/07	21:13	2	.39827	.4 ✓		
2705030178_5X	5/8/07	21:17	5	7.9337	7.9 ✓		
2705030179_10X	5/8/07	21:22	10	31.480	31 ✓		
2705030180	5/8/07	21:26	2	1.4359	1.4 ✓		
2705030182	5/8/07	21:31	2	4.6851	4.7 ✓		
2705030183	5/8/07	21:35	2	0.0020	.002 ✓		
MBLANK6010	5/8/07	21:39	1	0.0003	0.0003		

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
CCV	5/8/07	21:42	1	5.0522	5.05	90-110	101%
CCB	✓ 5/8/07	21:46	1	0.0002	0.0002		
LCS	5/8/07	21:49	1	.95261	.953 ✓	85-115	95.2%
LCS D	5/8/07	21:52	1	.96334	.963 ✓	85-115	96.3%
2705020848 ✓ ✓	5/8/07	21:54	2	1.4624	1.5 ✓		
2705020848MS	5/8/07	21:58	2	2.3957	2.4	✓ [0.933]	46.6 93.1
2705020848MSD	5/8/07	22:02	2	2.3215	2.32	✓ [0.859]	42.9 85.9
2705020848T	5/8/07	22:02	2		2.00	70 - 130	
2705020851 ✓ ✓	5/8/07	22:06	2	.15137	.150 ✓		
2705020851MS	5/8/07	22:10	2	1.1115	1.11	[0.960]	48.0 96.0
2705020851MSD	5/8/07	22:14	2	1.0740	1.07	[0.923]	46.1 92.3
2705020851T	5/8/07	22:14	2		2.00	70 - 130	
2705020837_20X ✓	5/8/07	22:18	20	29.332	29 ✓		
2705020838_10X ✓	5/8/07	22:22	10	31.060	31 ✓		
CCV	5/8/07	22:26	1	5.1182	5.12	90-110	102%
CCB	✓ 5/8/07	22:29	1	0.0007	0.0007		
MCV	5/8/07	22:33	1	2.5114	2.51	90-110	100%
2705020839_10X ✓	5/8/07	22:36	10	17.985	18 ✓		
2705020840_10X ✓	5/8/07	22:40	10	30.056	30 ✓		
2705020841_10X ✓	5/8/07	22:45	10	30.509	31 ✓		
2705020842_10X ✓	5/8/07	22:49	10	26.002	26 ✓		
2705020843_5X ✓	5/8/07	22:54	5	15.451	15 ✓		
2705020844_5X ✓	5/8/07	22:58	5	12.856	13 ✓		
2705020845_5X ✓	5/8/07	23:02	5	12.262	12 ✓		
2705020846 ✓ ✓	5/8/07	23:07	2	9.1094	9.1 ✓		
2705020847 ✓ ✓	5/8/07	23:11	2	4.8769	4.9 ✓		
2705020849 ✓ ✓	5/8/07	23:16	2	.67016	.670 ✓		
CCV	5/8/07	23:20	1	5.0380	5.04	90-110	100%
CCB	✓ 5/8/07	23:23	1	0.0009	0.0008		
2705020850 ✓ ✓	5/8/07	23:27	2	.37374	.370 ✓		
2705020852 ✓ ✓	5/8/07	23:31	2	.52960	.530 ✓		
2705020853 ✓ ✓	5/8/07	23:36	2	1.4930	1.5 ✓		
2705020854_5X ✓	5/8/07	23:40	5	16.473	16 ✓		
2705020855 ✓ ✓	5/8/07	23:44	2	0.0674	.067 ✓		
2705020856 ✓ ✓	5/8/07	23:49	2	0.0443	.044 ✓		
MBLANK6010	✓ 5/8/07	23:53	1	0.0005	0.0004		
LCS	5/8/07	23:57	1	.99275	.993 ✓	85-115	99.2%
LCS D	5/9/07	0:00	1	.94615	.946 ✓	85-115	94.6%
2705030184	5/9/07	0:02	2	2.6794	2.7 ✓		
CCV	5/9/07	0:06	1	5.0435	5.04	90-110	100%
CCB	✓ 5/9/07	0:09	1	0.0005	0.0005		
MCV	5/9/07	0:13	1	2.5523	2.55	90-110	102%
2705030184MS	5/9/07	0:16	2	3.6336	3.63	✓ [0.954]	47.7 95.4
2705030184MSD	5/9/07	0:19	2	3.6551	3.66	✓ [0.976]	48.7 97.6
2705030184T	5/9/07	0:19	2		2.00	70 - 130	
2705040334	5/9/07	0:22	2	0.0628	.063 ✓		
2705040334MS	5/9/07	0:26	2	1.0150	1.02	[0.952]	47.6 95.2
2705040334MSD	5/9/07	0:30	2	1.0271	1.03	[0.964]	48.2 96.4
2705040334T	5/9/07	0:30	2		2.00	70 - 130	
2705030203_5X	5/9/07	0:34	5	16.887	17 ✓		

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
2705030204	5/9/07	0:38	2	6.2173	6.2 ✓		
2705030205	5/9/07	0:43	2	2.8850	2.9 ✓		
2705030206	5/9/07	0:47	2	0.0024	.0024 ✓		
2705030207	5/9/07	0:51	2	0.0034	.0034 ✓		
CCV	5/9/07	0:56	1	5.0408	5.04	90-110	100%
CCB	5/9/07	0:59	1	0.0006	0.0005		
2705030208	5/9/07	1:03	2	.86938	.870 ✓		
2705030211	5/9/07	1:07	2	0.0015	.0015 ✓		
2705030217	5/9/07	1:11	2	.10505	.110 ✓		
2705030218	5/9/07	1:16	2	.12825	.130 ✓		
2705030219	5/9/07	1:20	2	0.0003	0.0003 ✓		
2705030220	5/9/07	1:23	2	.30463	.3 ✓		
2705040313	5/9/07	1:27	2	0.0458	.046 ✓		
2705040314	5/9/07	1:31	2	0.0004	0.0003 ✓		
2705040316	5/9/07	1:35	2	.26825	.270 ✓		
2705040327	5/9/07	1:39	2	0.0046	.0046 ✓		
CCV	5/9/07	1:44	1	5.0578	5.06	90-110	101%
CCB	5/9/07	1:47	1	0.0004	0.0003		
MCV	5/9/07	1:50	1	2.4811	2.48	90-110	99.2%
2705040328	5/9/07	1:53	2	0.0044	.0044 ✓		
2705040330	5/9/07	1:58	2	0.0415	.041 ✓		
2705040331	5/9/07	2:02	2	1.1890	1.2 ✓		
ICSA	5/9/07	2:06	1	-0.0005	ND	80-120	
ICSAB	5/9/07	2:10	1	.25018	.25	80-120	100%
Wash	5/9/07	2:14	1	0.0001	0.0001		
QC-25 lppm	5/9/07	2:19	1	1.0047	1.0		
ECV	5/9/07	2:22	1	5.0433	5.04	90-110	100%
ECB	5/9/07	2:26	1	0.0001	0.0001		
MRL	5/9/07	2:29	1	0.0102	.0102	50-150	101%

Landscape Summary

File ID: 070508a

Date: 5/8/07

Analyst: wbh

Page: 1

Sample ID	Time	SCA	YR	AG	AL	AS	B	BA	BE	CA	CD	CO
ICV	18:51	N/A	N/A	1.98/2	9.51/10	9.86/10	4.97	9.93/10	3.96/4	99.6/100	4.87/5	9.92
LINEARITY	18:54	N/A	N/A	-.028	-.000	-.078	0.023	0.001	-.000	294/300	0.000	0.002
ICSA	18:58	N/A	N/A	-.029	249/250	-.214	0.080	0.002	-.000	255/250	0.002	0.001
ICSAB	19:02	N/A	N/A	0.181	248/250	-.215	0.074	0.263/.25	0.253/.25	253/250	0.506/.5	0.244/.25
Wash	19:06	N/A	N/A	-.0000	0.0342	0.0025	0.0093	-.0000	0.0001	0.0244	-.0001	-.0001
QC-25 ppm	19:09	N/A	N/A	0.9550	0.9664	0.9757	0.9114	1.033	0.9672	1.032	0.9544	1.030
CCV	19:14	N/A	N/A	0.998/1	4.82/5	4.92/5	2.46	5.08/5	2.05/2	51.2/50	2.48/2.5	5.07
ICB	19:18	N/A	N/A	-.0001	0.0051	0.0173	0.0183	0.0001	0.0001	0.0001	0.0000	-.0001
MRL	19:21	N/A	N/A	0.010/.01	0.042/.05	0.101/.1	0.058	0.020/.02	0.001/.001	1.00/1	0.005/.005	0.049/.05
WASH	19:25	N/A	N/A	-.0001	-.0020	0.0051	0.0101	0.0000	0.0001	1.04/1	-.0001	0.0000
MRL6010	19:29	N/A	N/A	0.009/.01	0.054/.05	0.100/.1	0.054	0.020/.02	0.001/.001	0.0318	0.005/.005	0.051/.05
MELANK6010	19:32	N/A	N/A	-.0002	-.0043	0.0035	0.0079	0.0001	0.0001	0.0318	-.0002	0.0000
LCS	19:36	N/A	N/A	N/A	N/A	N/A	N/A	0.978/1	0.051/.05	49.3/50	0.210/.2	0.998/1
LCSB	19:39	N/A	N/A	N/A	N/A	N/A	N/A	0.983/1	0.051/.05	50.2/50	0.212/.2	1.00/1
2705020861	19:42	N/A	N/A	N/A	N/A	N/A	N/A	0.0005	0.0002	0.3480	-.0001	-.0001
2705020861MS	19:45	N/A	N/A	N/A	N/A	N/A	N/A	0.9536	0.0489	47.58	0.2018	0.9690
2705020861MSD	19:48	N/A	N/A	N/A	N/A	N/A	N/A	0.9659	0.0498	48.20	0.2043	0.9804
2705030181	19:52	N/A	N/A	N/A	N/A	N/A	N/A	0.0279	-.0006	238.6	0.0022	0.0059
2705030181MS	19:56	N/A	N/A	N/A	N/A	N/A	N/A	1.018	0.0509	283.8	0.2209	1.009
CCV	20:00	N/A	N/A	N/A	N/A	N/A	N/A	5.15/5	2.08/2	51.5/50	2.59/2.5	5.14
CCB	20:03	N/A	N/A	N/A	N/A	N/A	N/A	-.0000	0.0001	-.0001	0.0001	-.0001
2705030181MSD	20:06	N/A	N/A	N/A	N/A	N/A	N/A	0.9967	0.0490	275.6	0.2164	0.9864
2705020857	20:10	N/A	N/A	N/A	N/A	N/A	N/A	0.0158	-.0005	246.1	0.0019	-.0004
27060858	20:15	N/A	N/A	N/A	N/A	N/A	N/A	0.0315	-.0008	346.4	0.0007	-.0007
2705020859	20:19	N/A	N/A	N/A	N/A	N/A	N/A	0.0246	-.0001	215.4	0.0026	0.0003
2705020860 5X	20:23	N/A	N/A	N/A	N/A	N/A	N/A	0.0373	-.0012	430.1	-.0025	-.0013
2705020862	20:28	N/A	N/A	N/A	N/A	N/A	N/A	0.0194	-.0005	220.2	0.0017	-.0010
2705020863	20:32	N/A	N/A	N/A	N/A	N/A	N/A	0.0209	-.0002	215.5	0.0023	-.0001
2705020864	20:37	N/A	N/A	N/A	N/A	N/A	N/A	0.0544	-.0007	256.6	0.0024	-.0010
2705030127	20:41	N/A	N/A	N/A	N/A	N/A	N/A	0.0451	-.0013	731.7	0.0035	-.0014
2705030133	20:45	N/A	N/A	N/A	N/A	N/A	N/A	0.0375	-.0010	531.8	-.0002	-.0005
CCV	20:50	N/A	N/A	N/A	N/A	N/A	N/A	5.06/5	2.05/2	51.0/50	2.55/2.5	5.05
CCB	20:53	N/A	N/A	N/A	N/A	N/A	N/A	0.0000	0.0000	0.0004	0.0002	-.0002
MCV	20:57	N/A	N/A	N/A	N/A	N/A	N/A	2.53/2.5	1.02/1	25.6/25	1.26/1.25	2.51
2705030134	21:00	N/A	N/A	N/A	N/A	N/A	N/A	0.0398	-.0014	625.4	0.0007	-.0016
2705030135	21:04	N/A	N/A	N/A	N/A	N/A	N/A	0.0498	-.0012	580.4	0.0059	0.0059
2705030175 5X	21:09	N/A	N/A	N/A	N/A	N/A	N/A	0.0471	-.0008	658.1	-.0017	0.0022
2705030177	21:13	N/A	N/A	N/A	N/A	N/A	N/A	0.0127	-.0006	284.5	0.0011	0.0002
2705030178 5X	21:17	N/A	N/A	N/A	N/A	N/A	N/A	0.0238	-.0011	473.1	-.0025	-.0007
2705030179 10X	21:22	N/A	N/A	N/A	N/A	N/A	N/A	0.0511	-.0021	520.5	-.0053	0.0002
2705030180	21:26	N/A	N/A	N/A	N/A	N/A	N/A	0.0206	-.0005	273.9	-.0000	-.0001
2705030182	21:31	N/A	N/A	N/A	N/A	N/A	N/A	0.0200	-.0012	631.5	0.0006	-.0001
2705030183	21:35	N/A	N/A	N/A	N/A	N/A	N/A	0.0064	0.0001	0.9970	-.0004	0.0010
MELANK6010	21:39	N/A	N/A	N/A	N/A	N/A	N/A	0.0001	0.0001	0.0285	-.0003	0.0001
CCV	21:42	N/A	N/A	N/A	N/A	N/A	N/A	5.04/5	2.05/2	51.0/50	2.54/2.5	5.03
CCB	21:46	N/A	N/A	N/A	N/A	N/A	N/A	-.0000	0.0000	-.0017	0.0000	-.0001
LCS	21:49	N/A	N/A	N/A	N/A	N/A	N/A	0.944/1	0.049/.05	47.4/50	0.204/.2	0.963/1
LCSB	21:52	N/A	N/A	N/A	N/A	N/A	N/A	0.964/1	0.050/.05	48.1/50	0.209/.2	0.983/1
2705020848	21:54	N/A	N/A	N/A	N/A	N/A	N/A	0.0384	-.0008	302.2	0.0016	-.0005

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2705020848MS	21:58	N/A	N/A	N/A	N/A	N/A	N/A	1.013	0.0499	341.2	0.2190	0.9833
2705020848MSD	22:02	N/A	N/A	N/A	N/A	N/A	N/A	0.9782	0.0483	331.9	0.2105	0.9497
2705020851	22:06	N/A	N/A	N/A	N/A	N/A	N/A	0.0278	-0.0008	385.0	0.0014	-0.0006
2705020851MS	22:10	N/A	N/A	N/A	N/A	N/A	N/A	1.007	0.0496	418.5	0.2184	0.9714
2705020851MSD	22:14	N/A	N/A	N/A	N/A	N/A	N/A	0.9732	0.0477	406.1	0.2108	0.9376
2705020837_20X	22:18	N/A	N/A	N/A	N/A	N/A	N/A	0.0651	-0.025	970.6	-0.0088	-0.0048
2705020838_10X	22:22	N/A	N/A	N/A	N/A	N/A	N/A	0.0697	-0.027	1045.4	-0.0026	-0.0010
CCV	22:26	N/A	N/A	N/A	N/A	N/A	N/A	5.09/5	2.05/2	51.8/50	2.56/2.5	5.09
CCB	22:29	N/A	N/A	N/A	N/A	N/A	N/A	0.0001	0.0000	-0.0006	0.0002	-0.0000
MCV	22:33	N/A	N/A	N/A	N/A	N/A	N/A	2.54/2.5	1.02/1	25.6/25	1.26/1.25	2.53
2705020839_10X	22:36	N/A	N/A	N/A	N/A	N/A	N/A	0.0479	-0.0018	783.3	0.0002	0.0012
2705020840_10X	22:40	N/A	N/A	N/A	N/A	N/A	N/A	0.0714	-0.0029	1240.1	-0.0056	-0.0011
2705020841_10X	22:45	N/A	N/A	N/A	N/A	N/A	N/A	0.0674	-0.0025	1225.4	-0.0053	-0.0008
2705020842_10X	22:49	N/A	N/A	N/A	N/A	N/A	N/A	0.0534	-0.0026	916.9	-0.0052	0.0018
2705020843_5X	22:54	N/A	N/A	N/A	N/A	N/A	N/A	0.0564	-0.0019	804.9	-0.0025	0.0002
2705020844_5X	22:58	N/A	N/A	N/A	N/A	N/A	N/A	0.0420	-0.0018	725.4	-0.0019	-0.0010
2705020845_5X	23:02	N/A	N/A	N/A	N/A	N/A	N/A	0.0434	-0.0015	564.6	-0.0017	-0.0008
2705020846	23:07	N/A	N/A	N/A	N/A	N/A	N/A	0.0397	-0.0010	418.0	0.0008	0.0003
2705020847	23:11	N/A	N/A	N/A	N/A	N/A	N/A	0.0343	-0.0010	362.9	0.0012	0.0001
2705020849	23:16	N/A	N/A	N/A	N/A	N/A	N/A	0.0428	-0.0008	446.3	0.0008	0.0000
CCV	23:20	N/A	N/A	N/A	N/A	N/A	N/A	5.03/5	2.04/2	51.0/50	2.54/2.5	5.03
CCB	23:23	N/A	N/A	N/A	N/A	N/A	N/A	0.0000	0.0001	-0.0003	0.0001	-0.0000
2705020850	23:27	N/A	N/A	N/A	N/A	N/A	N/A	0.0369	-0.0010	525.4	0.0004	-0.0003
2705020852	23:31	N/A	N/A	N/A	N/A	N/A	N/A	0.0468	-0.0008	473.8	0.0006	-0.0005
2705020853	23:36	N/A	N/A	N/A	N/A	N/A	N/A	0.0137	-0.0012	678.5	0.0007	0.0001
2705020855	23:40	N/A	N/A	N/A	N/A	N/A	N/A	0.0428	-0.0017	760.2	-0.0017	0.0013
2705020856	23:44	N/A	N/A	N/A	N/A	N/A	N/A	0.0256	-0.0007	354.9	0.0008	-0.0012
MBLANK6010	23:49	N/A	N/A	N/A	N/A	N/A	N/A	0.0184	-0.0003	105.8	0.0003	-0.0006
LCS	23:53	N/A	N/A	N/A	N/A	N/A	N/A	0.0000	0.0001	0.0268	-0.0001	-0.0002
LCSD	23:57	N/A	N/A	N/A	N/A	N/A	N/A	0.988/1	0.051/.05	48.2/50	0.213/.2	1.01/1
2705030184	0:00	N/A	N/A	N/A	N/A	N/A	N/A	0.937/1	0.048/.05	46.8/50	0.204/.2	0.959/1
CCV	0:02	N/A	N/A	N/A	N/A	N/A	N/A	0.0113	-0.0005	46.35	0.0046	-0.0004
CCB	0:06	N/A	N/A	N/A	N/A	N/A	N/A	5.01/5	2.02/2	50.8/50	2.54/2.5	5.03
MCV	0:09	N/A	N/A	N/A	N/A	N/A	N/A	0.0000	0.0000	-0.0020	0.0001	-0.0002
2705030184MS	0:13	N/A	N/A	N/A	N/A	N/A	N/A	2.59/2.5	1.03/1	26.4/25	1.29/1.25	2.57
2705030184MSD	0:16	N/A	N/A	N/A	N/A	N/A	N/A	0.9810	0.0498	94.70	0.2180	0.9971
2705040334	0:19	N/A	N/A	N/A	N/A	N/A	N/A	1.001	0.0500	94.75	0.2224	1.017
2705040334MS	0:22	N/A	N/A	N/A	N/A	N/A	N/A	0.0403	-0.0006	305.6	0.0022	-0.0009
2705040334MSD	0:26	N/A	N/A	N/A	N/A	N/A	N/A	1.003	0.0490	340.1	0.2146	0.9650
2705030203_5X	0:30	N/A	N/A	N/A	N/A	N/A	N/A	1.022	0.0494	344.0	0.2186	0.9825
2705030204	0:34	N/A	N/A	N/A	N/A	N/A	N/A	0.0511	-0.0019	729.9	-0.0025	0.0008
2705030205	0:38	N/A	N/A	N/A	N/A	N/A	N/A	0.0263	-0.0010	442.3	0.0003	0.0004
2705030206	0:43	N/A	N/A	N/A	N/A	N/A	N/A	0.0204	-0.0011	710.4	0.0007	0.0011
2705030207	0:47	N/A	N/A	N/A	N/A	N/A	N/A	0.0252	-0.0007	190.2	0.0015	0.0011
CCV	0:51	N/A	N/A	N/A	N/A	N/A	N/A	4.99/5	2.04/2	124.1	0.0011	0.0010
CCB	0:56	N/A	N/A	N/A	N/A	N/A	N/A	-0.0000	0.0000	51.3/50	2.53/2.5	5.01
2705030208	0:59	N/A	N/A	N/A	N/A	N/A	N/A	-0.0000	0.0000	-0.0023	0.0001	-0.0002
2705030211	1:03	N/A	N/A	N/A	N/A	N/A	N/A	0.0406	-0.0009	609.7	0.0031	0.0007
2705030217	1:07	N/A	N/A	N/A	N/A	N/A	N/A	0.0591	-0.0006	271.2	0.0004	0.0071
	1:11	N/A	N/A	N/A	N/A	N/A	N/A	0.0461	-0.0014	1102.6	-0.0003	0.0020

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2705030218	1:16	N/A	N/A	N/A	N/A	N/A	N/A	0.0755	- .0009	709.6	0.0011	0.0070
2705030219	1:20	N/A	N/A	N/A	N/A	N/A	N/A	0.0002	0.0001	0.2448	- .0002	- .0005
2705030220	1:23	N/A	N/A	N/A	N/A	N/A	N/A	0.1572	- .0011	\$1689.1	0.0004	0.0083
2705040313	1:27	N/A	N/A	N/A	N/A	N/A	N/A	0.1933	- .0005	804.4	0.0045	0.0193
2705040314	1:31	N/A	N/A	N/A	N/A	N/A	N/A	0.0000	0.0002	0.0906	- .0004	- .0002
2705040316	1:35	N/A	N/A	N/A	N/A	N/A	N/A	0.0152	- .0010	595.3	0.0023	- .0008
2705040327	1:39	N/A	N/A	N/A	N/A	N/A	N/A	0.0850	- .0012	577.6	0.0015	0.0047
CCV	1:44	N/A	N/A	N/A	N/A	N/A	N/A	5.03/5	2.02/2	51.0/50	2.54/2.5	5.05
CCB	1:47	N/A	N/A	N/A	N/A	N/A	N/A	0.0000	0.0000	- .0016	0.0000	- .0003
MCV	1:50	N/A	N/A	N/A	N/A	N/A	N/A	2.51/2.5	1.00/1	25.4/25	1.25/1.25	2.50
2705040328	1:53	N/A	N/A	N/A	N/A	N/A	N/A	0.0921	- .0012	573.1	0.0011	0.0032
2705040330	1:58	N/A	N/A	N/A	N/A	N/A	N/A	0.0198	0.0011	497.7	- .0004	0.0100
2705040331	2:02	N/A	N/A	N/A	N/A	N/A	N/A	0.0247	- .0008	494.3	0.0014	0.0001
ICSA	2:06	N/A	N/A	N/A	N/A	N/A	N/A	0.002	- .000	253/250	- .002	0.001
ICSAB	2:10	N/A	N/A	N/A	N/A	N/A	N/A	0.258/.25	0.249/.25	256/250	0.496/.5	0.242/.25
Wash	2:14	N/A	N/A	N/A	N/A	N/A	N/A	0.0000	0.0000	0.0004	0.0000	- .0003
QC-25 lppm	2:19	N/A	N/A	N/A	N/A	N/A	N/A	1.024	0.9617	1.011	0.9654	1.024
ECV	2:22	N/A	N/A	N/A	N/A	N/A	N/A	5.01/5	2.02/2	50.8/50	2.54/2.5	5.04
ECB	2:26	N/A	N/A	N/A	N/A	N/A	N/A	- .0001	0.0001	- .0027	- .0001	- .0001
MRL	2:29	N/A	N/A	N/A	N/A	N/A	N/A	0.020/.02	0.001/.001	1.01/1	0.007/.005	0.050/.05

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ICV	18:51	9.89/10	9.89/10	9.91/10	99.4/100	99.6/100	9.92/10	9.91/10	99.0/100	9.91/10	9.83/10	9.66/10
LINEARITY	18:54	0.002	-0.012	98.9	305	187	0.004	0.001	2977/300	0.001	-0.004	0.013
ICSA	18:58	-0.001	-0.013	100/100	0.257	241/250	0.003	-0.001	0.110	-0.001	-0.039	0.012
ICSA	19:02	0.251/.25	0.253/.25	99.8/100	0.113	240/250	0.265/.25	-0.002	0.069	0.479/.5	0.465/.5	0.009
Wash	19:06	-0.002	-0.002	0.0135	0.0063	0.0257	-0.0001	0.0000	0.0125	0.0001	0.0021	0.0015
QC-25 ppm	19:09	0.9987	0.9588	1.029	9.544	1.087	1.032	0.9572	1.027	1.038	1.042	0.9480
CCV	19:14	5.03/5	4.99/5	5.14/5	48.9/50	52.1/50	0.0001	0.0000	0.0317	0.0000	5.11/5	4.90/5
ICB	19:18	-0.002	-0.000	0.0017	0.0643	0.0011	0.0001	0.0012	0.0000	0.0000	0.0032	0.0058
MRL	19:21	0.010/.01	0.009/.01	0.021/.02	0.923/1	0.105/.1	0.002/.002	0.019/.02	0.985/1	0.020/.02	0.023/.02	0.045/.05
WASH	19:25	-0.003	-0.003	0.0029	0.0130	0.0001	0.0000	0.0003	0.0165	0.0000	0.0015	0.0035
MRL6010	19:29	0.010/.01	0.010/.01	0.024/.02	0.967/1	0.108/.1	0.002/.002	0.019/.02	1.01/1	0.021/.02	0.021/.02	0.048/.05
MELANK6010	19:32	-0.003	-0.003	0.0040	-0.435	0.0010	0.0000	-0.000	0.0688	0.0004	0.0025	0.0037
LCS	19:36	0.985/1	0.987/1	5.00/5	19.1/20	20.4/20	0.506/.5	0.979/1	N/A	0.501/.5	1.02/1	N/A
LCSD	19:39	0.972/1	0.987/1	4.97/5	19.6/20	20.8/20	0.505/.5	0.987/1	N/A	0.504/.5	1.02/1	N/A
2705020861	19:42	0.0003	-0.002	0.0227	-0.300	0.1615	0.0021	0.0011	N/A	0.0005	0.0017	N/A
2705020861MS	19:45	0.9429	0.9433	4.895	18.37	20.02	0.4934	0.9461	N/A	0.4876	0.9951	N/A
2705020861MSD	19:48	0.9603	0.9605	4.989	18.77	20.43	0.5019	0.9561	N/A	0.4940	1.004	N/A
2705030181	19:52	0.3406	0.0034	0.0016	9.327	116.0	0.0117	0.1339	N/A	0.0054	-0.131	N/A
2705030181MS	19:56	1.314	1.054	5.118	29.34	134.0	0.5270	1.123	N/A	0.5003	0.9887	N/A
CCV	20:00	5.17/5	5.04/5	50.5/50	50.5/50	52.6/50	5.18/5	5.11/5	N/A	5.20/5	5.22/5	N/A
CCB	20:03	-0.000	-0.000	0.0023	0.0245	0.0002	0.0002	0.0009	N/A	0.0000	0.0002	N/A
2705030181MSD	20:06	1.270	1.017	5.014	28.91	130.7	0.5081	1.101	N/A	0.4905	0.9639	N/A
2705020857	20:10	0.0907	0.0039	0.0437	8.261	140.8	0.0034	0.0257	N/A	-0.0009	-0.110	N/A
2705020858	20:15	1.094	0.0037	-0.0021	20.74	182.8	0.0110	0.0239	N/A	-0.0006	-0.114	N/A
2705020859	20:19	0.0812	0.0042	1.141	9.873	131.8	0.0744	0.0098	N/A	0.0018	-0.043	N/A
2705020860_5X	20:23	12.12	0.0060	-0.104	60.41	279.5	0.0219	0.0165	N/A	-0.005	-0.182	N/A
2705020862	20:28	0.7151	0.0020	2.433	14.18	122.3	0.1501	0.0189	N/A	-0.011	-0.056	N/A
2705020863	20:32	0.0807	0.0039	0.6829	9.724	130.5	0.0569	0.0101	N/A	0.0013	-0.058	N/A
2705020864	20:37	0.0319	0.0074	-0.028	21.26	98.27	0.1090	0.0361	N/A	-0.003	-0.193	N/A
2705030127	20:41	-0.003	0.0041	0.8485	22.35	711.4	1.620	0.0007	N/A	-0.011	-0.166	N/A
2705030133	20:45	0.0001	0.0051	0.1541	21.18	347.4	0.0343	0.0124	N/A	0.0007	-0.166	N/A
CCV	20:50	5.09/5	4.98/5	5.22/5	49.8/50	52.3/50	5.09/5	5.02/5	N/A	5.12/5	5.15/5	N/A
CCB	20:53	-0.001	-0.003	0.0016	0.0486	0.0011	0.0000	0.0009	N/A	0.0000	0.0003	N/A
MCV	20:57	2.52/2.5	2.47/2.5	2.60/2.5	24.66	26.4/25	2.58/2.5	2.47/2.5	N/A	2.55/2.5	2.56/2.5	N/A
2705030134	21:00	0.0005	0.0052	0.0208	24.66	392.7	0.0017	0.0243	N/A	-0.026	-0.218	N/A
2705030135	21:04	0.0009	0.0053	0.0030	16.44	496.9	2.065	0.0282	N/A	0.0027	-0.223	N/A
2705030175_5X	21:09	12.69	0.0060	0.4688	23.71	291.9	0.3596	0.0047	N/A	0.0008	-0.269	N/A
2705030177	21:13	0.3983	0.0023	0.0427	28.01	220.2	1.766	0.0210	N/A	-0.134	-0.127	N/A
2705030178_5X	21:17	7.934	0.0033	0.0114	23.00	190.7	0.0032	0.0118	N/A	-0.004	-0.127	N/A
2705030179_10X	21:22	31.48	0.0055	0.0509	33.21	276.4	0.0223	0.0334	N/A	-0.005	-0.093	N/A
2705030180	21:26	1.436	0.0028	0.0507	16.53	209.7	0.0086	0.0169	N/A	-0.005	-0.093	N/A
2705030182	21:31	4.685	0.0043	-0.041	26.05	390.4	0.0036	0.0148	N/A	0.0009	-0.210	N/A
2705030183	21:35	0.0020	0.0009	0.0323	0.0007	0.4319	0.0897	-0.0004	N/A	0.0008	0.0047	N/A
MELANK6010	21:39	0.0003	-0.004	0.0140	0.0046	0.0020	0.0000	-0.0004	N/A	-0.002	0.0011	N/A
CCV	21:42	5.05/5	4.96/5	5.14/5	48.7/50	52.4/50	5.10/5	4.99/5	N/A	5.08/5	5.10/5	N/A
CCB	21:46	0.0002	-0.001	0.0015	-0.147	0.0006	0.0000	-0.0009	N/A	0.0002	-0.004	N/A
LCS	21:49	0.953/1	0.947/1	4.86/5	18.4/20	19.8/20	0.487/.5	0.944/1	N/A	0.484/.5	-0.004	N/A
LCSD	21:52	0.963/1	0.970/1	5.02/5	19.0/20	20.4/20	0.498/.5	0.969/1	N/A	0.494/.5	1.01/1	N/A
2705020848	21:54	1.462	0.0032	-0.0034	30.55	149.4	0.0502	0.0345	N/A	-0.004	-0.019	N/A

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Sample ID	Time	CR	CU	FE	K	MG	MN	MO	NA	NI	PE	SB
2705020848MS	21:58	2.396	1.039	5.049	50.05	165.1	0.5657	1.011	N/A	0.4842	0.9779	N/A
2705020848MSD	22:02	2.322	1.005	4.933	48.87	160.7	0.5479	0.9765	N/A	0.4666	0.9482	N/A
2705020851	22:06	0.1514	0.0025	0.0026	33.36	179.1	0.0192	0.0236	N/A	-0.0014	-0.0081	N/A
2705020851MS	22:10	1.112	1.021	5.009	52.29	192.0	0.5262	1.006	N/A	0.4771	0.9807	N/A
2705020851MSD	22:14	1.074	0.9821	4.892	51.29	186.5	0.5070	0.9703	N/A	0.4605	0.9500	N/A
2705020837_20X	22:18	29.33	0.0663	0.0707	52.34	502.0	0.4704	0.0185	N/A	-0.0020	-0.0403	N/A
2705020838_10X	22:22	31.06	0.0516	0.2541	46.29	540.0	0.1051	0.0152	N/A	-0.0025	-0.0534	N/A
CCV	22:26	5.12/5	5.04/5	5.25/5	49.9/50	53.2/50	5.17/5	5.04/5	N/A	5.14/5	5.17/5	N/A
CCB	22:29	0.0007	-0.0000	0.0002	-0.0068	0.0009	0.0000	0.0013	N/A	0.0002	0.0004	N/A
MCV	22:33	2.51/2.5	2.46/2.5	2.62/2.5	24.7/25	26.5/25	2.57/2.5	2.48/2.5	N/A	2.56/2.5	2.57/2.5	N/A
2705020839_10X	22:36	17.99	0.0169	6.555	44.83	451.3	0.2253	0.0313	N/A	0.0066	-0.0142	N/A
2705020840_10X	22:40	30.06	0.0052	1.175	51.98	615.7	0.0315	0.0165	N/A	0.0023	-0.0396	N/A
2705020841_10X	22:45	30.51	0.0072	0.1599	45.52	589.0	0.0275	0.0117	N/A	-0.0031	-0.0694	N/A
2705020842_10X	22:49	26.00	0.0054	-0.122	35.26	461.5	0.0425	0.0117	N/A	-0.0005	-0.0437	N/A
2705020843_5X	22:54	15.45	0.0060	0.1409	51.82	420.4	0.0711	0.0077	N/A	-0.0031	-0.0338	N/A
2705020844_5X	22:58	12.86	0.0040	-0.0041	34.18	374.5	0.0364	0.0088	N/A	-0.0017	-0.0284	N/A
2705020845_5X	23:02	12.26	0.0050	-0.0091	42.72	325.4	0.0357	0.0126	N/A	-0.0019	-0.0199	N/A
2705020846	23:07	9.109	0.0030	0.1981	40.09	246.9	0.0340	0.0185	N/A	0.0003	-0.0121	N/A
2705020847	23:11	4.877	0.0039	0.0200	38.31	212.3	0.0337	0.0270	N/A	0.0000	-0.0138	N/A
2705020849	23:16	0.6702	0.0030	-0.0074	37.17	208.4	0.0726	0.0279	N/A	-0.0006	-0.0136	N/A
CCV	23:20	5.04/5	4.95/5	5.21/5	49.1/50	52.5/50	5.10/5	4.98/5	N/A	5.07/5	5.09/5	N/A
CCB	23:23	0.0009	-0.0003	0.0007	-0.0002	0.0015	-0.0000	0.0008	N/A	-0.0001	-0.0002	N/A
2705020850	23:27	0.3737	0.0032	0.0466	40.92	249.3	0.0275	0.0195	N/A	0.0008	-0.0156	N/A
2705020852	23:31	0.5296	0.0198	1.411	43.98	210.1	0.0444	0.0265	N/A	0.0013	-0.0012	N/A
2705020853	23:36	1.493	0.0042	-0.0225	14.38	269.1	0.0001	0.0834	N/A	0.0018	-0.0206	N/A
2705020854_5X	23:40	16.47	0.0041	0.5295	44.99	437.7	0.1215	0.0239	N/A	0.0034	-0.0280	N/A
2705020855	23:44	0.0674	0.0036	0.0695	26.91	175.8	0.0183	0.0202	N/A	-0.0004	-0.0132	N/A
2705020856	23:49	0.0443	0.0010	0.0697	10.21	50.00	0.0065	0.0103	N/A	-0.0002	-0.0057	N/A
MELANK610	23:53	0.0005	-0.0005	0.0021	0.0183	0.0020	-0.0001	-0.0003	N/A	0.0000	0.0009	N/A
LCS	23:57	0.993/1	0.990/1	5.04/5	18.7/20	20.1/20	0.511/.5	0.990/1	N/A	0.506/.5	1.01/1	N/A
LCSD	0:00	0.946/1	0.932/1	4.84/5	18.1/20	19.7/20	0.481/.5	0.934/1	N/A	0.482/.5	0.979/1	N/A
CCV	0:02	2.679	0.0022	0.7794	18.85	36.69	0.0101	0.0248	N/A	-0.0007	-0.0050	N/A
CCB	0:06	5.04/5	4.91/5	5.10/5	48.6/50	52.4/50	5.06/5	4.97/5	N/A	5.07/5	5.09/5	N/A
CCV	0:09	0.0005	-0.0004	-0.0005	0.0055	0.0012	-0.0000	0.0012	N/A	-0.0001	0.0007	N/A
MCV	0:13	2.55/2.5	2.49/2.5	2.71/2.5	25.3/25	27.5/25	2.61/2.5	2.52/2.5	N/A	2.60/2.5	2.61/2.5	N/A
2705030184MS	0:16	3.634	1.015	5.874	38.64	57.06	0.5148	0.9858	N/A	0.4976	0.9872	N/A
2705030184MSD	0:19	3.655	1.019	5.815	38.29	57.08	0.5182	1.006	N/A	0.5073	1.009	N/A
2705040334	0:22	0.0628	0.0018	0.0006	17.51	196.9	0.0003	0.0174	N/A	-0.0004	-0.0128	N/A
2705040334MS	0:26	1.015	0.9955	5.050	36.93	206.8	0.4993	0.9792	N/A	0.4736	0.9707	N/A
2705040334MSD	0:30	1.027	1.017	5.057	37.01	211.0	0.5075	0.9989	N/A	0.4818	0.9872	N/A
2705030203_5X	0:34	16.89	0.0048	0.4983	48.50	373.9	0.1592	0.0170	N/A	-0.0001	-0.0290	N/A
2705030204	0:38	6.217	0.0030	0.0950	82.56	268.9	0.1462	0.0359	N/A	0.0056	-0.0134	N/A
2705030205	0:43	2.885	0.0045	0.6530	10.67	255.2	0.0951	0.0390	N/A	0.0035	-0.0197	N/A
2705030206	0:47	0.0024	0.0068	0.2865	19.85	62.18	0.8264	0.0852	N/A	0.0038	-0.0078	N/A
2705030207	0:51	0.0034	0.0070	1.031	18.98	59.24	0.6788	0.0819	N/A	0.0049	-0.0093	N/A
CCV	0:56	5.04/5	4.94/5	5.13/5	49.1/50	52.9/50	5.09/5	4.94/5	N/A	5.06/5	5.07/5	N/A
CCB	0:59	0.0006	-0.0005	0.0003	0.0405	0.0009	-0.0000	0.0012	N/A	-0.0003	0.0010	N/A
2705030208	1:03	0.8694	0.0052	2.487	13.79	268.4	0.0553	0.0423	N/A	0.0030	-0.0137	N/A
2705030211	1:07	0.0015	0.0051	0.3854	24.76	104.9	1.068	0.0334	N/A	0.0140	-0.0107	N/A
2705030217	1:11	0.1051	0.0056	1.373	27.38	479.7	0.0465	0.1147	N/A	0.0027	-0.0212	N/A

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Sample ID	Time	CR	CU	FE	K	MG	MN	MO	NA	NI	PB	SB
2705030218	1:16	0.1283	0.0085	3.993	34.33	300.6	1.214	0.0461	N/A	0.0092	-0.0177	N/A
2705030219	1:20	0.0003	-0.0013	0.0058	0.0721	0.0223	0.0004	-0.0004	N/A	0.0002	0.0010	N/A
2705030220	1:23	0.3046	0.0171	5.822	26.10	722.5	0.6184	0.0949	N/A	0.0117	-0.0327	N/A
2705040313	1:27	0.0458	0.0217	14.32	39.91	311.7	2.321	0.0317	N/A	0.0202	-0.0156	N/A
2705040314	1:31	0.0004	-0.0012	0.0088	0.0589	0.0121	0.0001	-0.0002	N/A	-0.0001	0.0018	N/A
2705040316	1:35	0.2683	0.0024	0.1030	13.78	248.1	0.0033	0.0311	N/A	-0.0013	-0.0166	N/A
2705040327	1:39	0.0046	0.0066	1.101	36.17	323.1	0.6729	0.0245	N/A	0.0045	-0.0140	N/A
CCV	1:44	5.06/5	4.93/5	5.20/5	50.6/50	52.8/50	5.08/5	4.97/5	N/A	5.09/5	5.08/5	N/A
CCB	1:47	0.0004	-0.0004	0.0017	0.0282	0.0006	-0.0001	0.0010	N/A	0.0002	0.0004	N/A
MCV	1:50	2.48/2.5	2.41/2.5	2.60/2.5	25.0/25	26.5/25	2.53/2.5	2.45/2.5	N/A	2.53/2.5	2.52/2.5	N/A
2705040328	1:53	0.0044	0.0075	1.040	35.91	318.1	0.7798	0.0271	N/A	0.0027	-0.0183	N/A
2705040330	1:58	0.0415	0.0014	1.047	51.53	426.1	120.5	0.0042	N/A	0.0441	0.0006	N/A
2705040331	2:02	1.189	0.0031	0.8000	20.38	261.3	0.2863	0.0483	N/A	0.0006	-0.0165	N/A
ICSA	2:06	-0.000	-0.013	101/100	0.088	243/250	0.003	-0.002	N/A	-0.001	-0.034	N/A
ICSAB	2:10	0.250/.25	0.248/.25	101/100	0.051	245/250	0.262/.25	-0.002	N/A	0.472/.5	0.463/.5	N/A
Wash	2:14	0.0001	-0.0009	0.0041	-0.0717	0.0047	0.0001	-0.0002	N/A	-0.0004	0.0005	N/A
QC-25 ppm	2:19	1.005	0.9554	1.018	9.696	1.084	1.030	0.9547	N/A	1.034	1.038	N/A
ECV	2:22	5.04/5	4.92/5	5.11/5	49.7/50	52.3/50	5.07/5	4.97/5	N/A	5.08/5	5.09/5	N/A
ECB	2:26	0.0001	-0.0008	-0.0000	-0.0315	0.0000	0.0001	0.0014	N/A	-0.0001	0.0015	N/A
MRL	2:29	0.010/.01	0.009/.01	0.021/.02	0.927/1	0.107/.1	0.002/.002	0.020/.02	N/A	0.020/.02	0.022/.02	N/A

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Sample ID	Time	SE	TL	V	ZN	ALX	BEX
ICV	18:51	9.86/10	9.86/10	9.97/10	9.84/10	9.89/10	3.96/4
LINEARITY	18:54	-0.10	-0.086	-0.02	0.024	0.005	-0.000
ICSA	18:58	-0.024	-0.075	-0.003	0.020	N/A	-0.000
ICSAB	19:02	-0.036	-0.079	0.252/.25	0.548/.5	N/A	0.253/.25
Wash	19:06	-0.028	0.0047	0.0001	0.0002	0.0079	0.0001
QC-25 ppm	19:09	0.9291	1.038	0.9720	1.012	0.9574	0.9670
ICV	19:14	5.10/5	5.22/5	5.06/5	5.12/5	4.98/5	2.05/2
CCB	19:18	0.0001	0.0058	-0.0001	0.0004	0.0005	0.0001
MRL	19:21	0.092/.1	0.109/.1	0.002/.002	0.020/.02	0.047/.05	0.001/.001
WASH	19:25	-0.044	0.0050	0.0000	0.0000	0.0003	0.0001
MRL6010	19:29	0.095/.1	0.110/.1	0.002/.002	0.024/.02	0.050/.05	0.001/.001
MBLANK6010	19:32	-0.049	0.0083	-0.0000	0.0055	0.0014	0.0001
LCS	19:36	N/A	N/A	0.987/1	1.03/1	N/A	N/A
LCSD	19:39	N/A	N/A	0.984/1	1.03/1	N/A	N/A
2705020861	19:42	N/A	N/A	0.0013	0.0082	N/A	N/A
2705020861MS	19:45	N/A	N/A	0.9478	0.9942	N/A	N/A
2705020861MSD	19:48	N/A	N/A	0.9667	1.008	N/A	N/A
2705030181	19:52	N/A	N/A	0.0587	0.0117	N/A	N/A
2705030181MS	19:56	N/A	N/A	1.059	1.084	N/A	N/A
CCV	20:00	N/A	N/A	5.11/5	5.21/5	N/A	N/A
CCB	20:03	N/A	N/A	0.0001	0.0002	N/A	N/A
2705030181MSD	20:06	N/A	N/A	1.018	1.080	N/A	N/A
2705020857	20:10	N/A	N/A	0.1273	0.0288	N/A	N/A
2705020858	20:15	N/A	N/A	0.0604	0.0198	N/A	N/A
2705020859	20:19	N/A	N/A	0.0373	0.0210	N/A	N/A
2705020860 5X	20:23	N/A	N/A	0.0384	0.0239	N/A	N/A
2705020862	20:28	N/A	N/A	0.0316	0.0231	N/A	N/A
2705020863	20:32	N/A	N/A	0.0371	0.0219	N/A	N/A
2705020864	20:37	N/A	N/A	0.0427	0.0189	N/A	N/A
2705030137	20:41	N/A	N/A	0.0046	0.0113	N/A	N/A
2705030133	20:45	N/A	N/A	0.0225	0.0145	N/A	N/A
CCV	20:50	N/A	N/A	5.04/5	5.12/5	N/A	N/A
CCB	20:53	N/A	N/A	-0.0001	0.0002	N/A	N/A
MCV	20:57	N/A	N/A	2.51/2.5	2.55/2.5	N/A	N/A
2705030134	21:00	N/A	N/A	0.0203	0.0155	N/A	N/A
2705030135	21:04	N/A	N/A	0.0427	0.0125	N/A	N/A
2705030175 5X	21:09	N/A	N/A	0.0270	0.0740	N/A	N/A
2705030177	21:13	N/A	N/A	0.0838	0.0167	N/A	N/A
2705030178 5X	21:17	N/A	N/A	0.0546	0.0138	N/A	N/A
2705030179 10X	21:22	N/A	N/A	0.0123	0.0916	N/A	N/A
2705030180	21:26	N/A	N/A	0.0262	0.0218	N/A	N/A
2705030182	21:31	N/A	N/A	0.0542	0.0422	N/A	N/A
2705030183	21:35	N/A	N/A	0.0004	0.0167	N/A	N/A
MBLANK6010	21:39	N/A	N/A	-0.0000	0.0042	N/A	N/A
CCV	21:42	N/A	N/A	5.05/5	5.10/5	N/A	N/A
CCB	21:46	N/A	N/A	0.0000	0.0000	N/A	N/A
LCS	21:49	N/A	N/A	0.952/1	0.994/1	N/A	N/A
LCSD	21:52	N/A	N/A	0.972/1	1.02/1	N/A	N/A
2705020848	21:54	N/A	N/A	0.0558	0.0134	N/A	N/A

Sample ID	Time	SE	TL	V	ZN	ALX	BEX
2705020848MS	21:58	N/A	N/A	1.039	1.073	N/A	N/A
2705020848MSD	22:02	N/A	N/A	1.007	1.026	N/A	N/A
2705020851	22:06	N/A	N/A	0.0303	0.0153	N/A	N/A
2705020851MS	22:10	N/A	N/A	1.013	1.059	N/A	N/A
2705020851MSD	22:14	N/A	N/A	0.9789	1.023	N/A	N/A
2705020837_20X	22:18	N/A	N/A	0.0477	0.4325	N/A	N/A
2705020838_10X	22:22	N/A	N/A	0.0416	0.1062	N/A	N/A
CCV	22:26	N/A	N/A	5.11/5	5.16/5	N/A	N/A
CCB	22:29	N/A	N/A	0.0000	0.0001	N/A	N/A
MCV	22:33	N/A	N/A	2.50/2.5	2.56/2.5	N/A	N/A
2705020839_10X	22:36	N/A	N/A	0.1077	0.1112	N/A	N/A
2705020840_10X	22:40	N/A	N/A	0.0448	0.0629	N/A	N/A
2705020841_10X	22:45	N/A	N/A	0.0269	0.1562	N/A	N/A
2705020842_10X	22:49	N/A	N/A	0.0488	0.0507	N/A	N/A
2705020843_5X	22:54	N/A	N/A	0.0422	0.0467	N/A	N/A
2705020844_5X	22:58	N/A	N/A	0.0336	0.1116	N/A	N/A
2705020845_5X	23:02	N/A	N/A	0.0443	0.0496	N/A	N/A
2705020846	23:07	N/A	N/A	0.0357	0.0797	N/A	N/A
2705020847	23:11	N/A	N/A	0.0297	0.0176	N/A	N/A
2705020849	23:16	N/A	N/A	0.0474	0.0099	N/A	N/A
CCV	23:20	N/A	N/A	5.03/5	5.08/5	N/A	N/A
CCB	23:23	N/A	N/A	0.0002	0.0000	N/A	N/A
2705020850	23:27	N/A	N/A	0.0276	0.0179	N/A	N/A
2705020852	23:31	N/A	N/A	0.0239	0.2848	N/A	N/A
2705020853	23:36	N/A	N/A	0.0566	0.0213	N/A	N/A
2705020854_5X	23:40	N/A	N/A	0.0503	0.0540	N/A	N/A
2705020855	23:44	N/A	N/A	0.0433	0.0444	N/A	N/A
2705020856	23:49	N/A	N/A	0.0299	0.0173	N/A	N/A
MBLANK6010	23:53	N/A	N/A	0.0001	0.0049	N/A	N/A
LCS	23:57	N/A	N/A	0.999/1	1.04/1	N/A	N/A
LCSD	0:00	N/A	N/A	0.939/1	0.987/1	N/A	N/A
2705030184	0:02	N/A	N/A	0.1196	0.0154	N/A	N/A
CCV	0:06	N/A	N/A	5.01/5	5.08/5	N/A	N/A
CCB	0:09	N/A	N/A	0.0001	0.0001	N/A	N/A
MCV	0:13	N/A	N/A	2.54/2.5	2.60/2.5	N/A	N/A
2705030184MS	0:16	N/A	N/A	1.096	1.094	N/A	N/A
2705030184MSD	0:19	N/A	N/A	1.100	1.105	N/A	N/A
2705040334	0:22	N/A	N/A	0.0399	0.0256	N/A	N/A
2705040334MS	0:26	N/A	N/A	1.010	1.050	N/A	N/A
2705040334MSD	0:30	N/A	N/A	1.022	1.080	N/A	N/A
2705030203_5X	0:34	N/A	N/A	0.0492	0.0360	N/A	N/A
2705030204	0:38	N/A	N/A	0.0686	0.0528	N/A	N/A
2705030205	0:43	N/A	N/A	0.0865	0.0298	N/A	N/A
2705030206	0:47	N/A	N/A	0.0181	0.0180	N/A	N/A
2705030207	0:51	N/A	N/A	0.0234	0.0232	N/A	N/A
CCV	0:56	N/A	N/A	5.04/5	5.07/5	N/A	N/A
CCB	0:59	N/A	N/A	0.0002	-0.0001	N/A	N/A
2705030208	1:03	N/A	N/A	0.0806	0.0329	N/A	N/A
2705030211	1:07	N/A	N/A	0.0624	0.0181	N/A	N/A
2705030217	1:11	N/A	N/A	0.0327	0.0223	N/A	N/A

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Analyst: wbh

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Sample ID	Time	SE	TL	V	ZN	ALX	BEX
2705030218	1:16	N/A	N/A	0.0794	0.0484	N/A	N/A
2705030219	1:20	N/A	N/A	0.0004	0.0153	N/A	N/A
2705030220	1:23	N/A	N/A	0.0456	0.0544	N/A	N/A
2705040313	1:27	N/A	N/A	0.2032	0.0589	N/A	N/A
2705040314	1:31	N/A	N/A	-.0005	0.0139	N/A	N/A
2705040316	1:35	N/A	N/A	0.0700	0.0220	N/A	N/A
2705040327	1:39	N/A	N/A	0.2980	0.0196	N/A	N/A
CCV	1:44	N/A	N/A	5.02/5	5.10/5	N/A	N/A
CCB	1:47	N/A	N/A	0.0001	0.0000	N/A	N/A
MCV	1:50	N/A	N/A	2.47/2.5	2.53/2.5	N/A	N/A
2705040328	1:53	N/A	N/A	0.2640	0.0169	N/A	N/A
2705040330	1:58	N/A	N/A	0.0193	0.0321	N/A	N/A
2705040331	2:02	N/A	N/A	0.0541	0.0264	N/A	N/A
ICSA	2:06	N/A	N/A	-.002	0.019	N/A	N/A
ICSAB	2:10	N/A	N/A	0.251/.25	0.537/.5	N/A	N/A
Wash	2:14	N/A	N/A	-.0000	-.0002	N/A	N/A
QC-25 1ppm	2:19	N/A	N/A	0.9781	1.007	N/A	N/A
ECV	2:22	N/A	N/A	5.02/5	5.08/5	N/A	N/A
ECB	2:26	N/A	N/A	0.0001	0.0000	N/A	N/A
MRL	2:29	N/A	N/A	0.002/.002	0.021/.02	N/A	N/A

=====
Analysis Begun

Start Time: 5/8/2007 18:43:56

Plasma On Time: 5/8/2007 17:29:42

Logged In Analyst: Owner

Technique: ICP Continuous

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

Sample Information File: C:\pe\Owner\Sample Information\070508A.sif

Batch ID: 070508A

Results Data Set: 070508A

Results Library: C:\pe\Owner\Results\Results.mdb
=====

Method Loaded

Method Name: 6010_060831

Method Last Saved: 2/7/2007 13:42:48

IEC File: IEC060831.iec

MSF File:

Method Description: 6010_060227

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

Sequence No.: 1

Autosampler Location: 0

Sample ID: Calib Blank 1

Date Collected: 5/8/2007 18:43:57

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
=====

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sca	384592.8	699.44	0.18%	100	%
Yr	320164.5	2956.14	0.92%	100	%
Ag†	494.4	57.54	11.64%	[0.00]	mg/L
Al†	47.6	48.14	101.23%	[0.00]	mg/L
As†	-1.7	3.44	205.09%	[0.00]	mg/L
B_†	132.2	0.12	0.09%	[0.00]	mg/L

Baf	-48.0	0.71	1.47%	[0.00]	mg/L
Bef	-5778.1	1.08	0.02%	[0.00]	mg/L
Caf	1053.7	9.77	0.93%	[0.00]	mg/L
Cdf	47.9	1.71	3.57%	[0.00]	mg/L
Cof	-56.7	0.49	0.86%	[0.00]	mg/L
Crt	262.2	10.01	3.82%	[0.00]	mg/L
Cuf	4335.2	25.19	0.58%	[0.00]	mg/L
Fef	-36.8	0.96	2.62%	[0.00]	mg/L
Kf	122.2	20.99	17.18%	[0.00]	mg/L
Mgf	8.5	3.59	42.39%	[0.00]	mg/L
Mnt	118.0	10.11	8.57%	[0.00]	mg/L
Mof	11.0	4.68	42.43%	[0.00]	mg/L
Naf	-590.4	32.46	5.50%	[0.00]	mg/L
Nif	-39.7	4.93	12.44%	[0.00]	mg/L
Pbf	-35.5	1.09	3.08%	[0.00]	mg/L
Sbf	-1.2	4.31	367.41%	[0.00]	mg/L
Sef	1.6	3.30	208.06%	[0.00]	mg/L
Tlf	-30.8	0.05	0.16%	[0.00]	mg/L
Vf	164.0	25.62	15.63%	[0.00]	mg/L
Znf	86.2	4.53	5.26%	[0.00]	mg/L
Alxt	229.3	42.49	18.53%	[0.00]	ug/L
Bext	-5778.1	1.08	0.02%	[0.00]	ug/L

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

Autosampler Location: 15
 Date Collected: 5/8/2007 18:47:42
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: Standard 2

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: Standard 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sca	346752.9	3249.72	0.94%	90.2 %
Yr	297934.8	2487.02	0.83%	93.1 %
Ag†	506952.8	490.97	0.10%	[2] mg/L
Al†	56564.7	235.75	0.42%	[10] mg/L
As†	17696.8	64.62	0.37%	[10] mg/L
B_†	146351.9	529.33	0.36%	[5.02] mg/L
Ba†	669238.4	385.92	0.06%	[10] mg/L
Be†	11422277.2	15431.92	0.14%	[4.01] mg/L
Ca†	1280069.5	5154.27	0.40%	[100] mg/L
Cd†	119011.6	20.82	0.02%	[5.01] mg/L
Co†	229431.4	186.55	0.08%	[10] mg/L
Cr†	713992.9	166.24	0.02%	[9.97] mg/L
Cu†	3794967.4	8910.50	0.23%	[10] mg/L
Fe†	25052.6	93.61	0.37%	[9.98] mg/L
K†	136372.7	83.31	0.06%	[100] mg/L
Mg†	760270.4	4307.07	0.57%	[100] mg/L
Mn†	5286657.8	2617.29	0.05%	[10] mg/L
Mo†	113040.2	19.81	0.02%	[9.98] mg/L
Na†	357391.6	2865.50	0.80%	[100] mg/L
Ni†	204956.5	120.20	0.06%	[10] mg/L
Pb†	44066.7	272.38	0.62%	[10] mg/L
Sb†	17726.2	125.68	0.71%	[10] mg/L
Se†	12473.7	76.37	0.61%	[10] mg/L
Tl†	25927.6	252.20	0.97%	[10] mg/L
V†	1570037.8	638.53	0.04%	[10] mg/L
Zn†	438920.1	429.16	0.10%	[10] mg/L
Alx†	974609.4	745.85	0.08%	[10000] ug/L
Bex†	11422277.2	15431.92	0.14%	[4010] ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag	1	Lin, Calc Int	0.0	253500	0.00000	1.000000	
Al	1	Lin, Calc Int	0.0	5656	0.00000	1.000000	
As	1	Lin, Calc Int	0.0	1770	0.00000	1.000000	
B_	1	Lin, Calc Int	0.0	29150	0.00000	1.000000	
Ba	1	Lin, Calc Int	0.0	66920	0.00000	1.000000	
Be	1	Lin, Calc Int	0.0	2848000	0.00000	1.000000	
Ca	1	Lin, Calc Int	-0.0	12800	0.00000	1.000000	
Cd	1	Lin, Calc Int	0.0	23750	0.00000	1.000000	
Co	1	Lin, Calc Int	0.0	22940	0.00000	1.000000	
Cr	1	Lin, Calc Int	0.0	71610	0.00000	1.000000	
Cu	1	Lin, Calc Int	0.0	379500	0.00000	1.000000	
Fe	1	Lin, Calc Int	0.0	2510	0.00000	1.000000	
K	1	Lin, Calc Int	0.0	1364	0.00000	1.000000	
Mg	1	Lin, Calc Int	0.0	7603	0.00000	1.000000	
Mn	1	Lin, Calc Int	0.0	528700	0.00000	1.000000	
Mo	1	Lin, Calc Int	0.0	11330	0.00000	1.000000	
Na	1	Lin, Calc Int	0.0	3574	0.00000	1.000000	
Ni	1	Lin, Calc Int	0.0	20500	0.00000	1.000000	
Pb	1	Lin, Calc Int	0.0	4407	0.00000	1.000000	
Sb	1	Lin, Calc Int	0.0	1773	0.00000	1.000000	
Se	1	Lin, Calc Int	0.0	1247	0.00000	1.000000	

Tl	1	Lin, Calc Int	0.0	2593	0.00000	1.000000
V	1	Lin, Calc Int	0.0	157000	0.00000	1.000000
Zn	1	Lin, Calc Int	0.0	43890	0.00000	1.000000
Alx	1	Lin, Calc Int	0.0	97.46	0.00000	1.000000
Bex	1	Lin, Calc Int	0.0	2848	0.00000	1.000000

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

Autosampler Location: 15
 Date Collected: 5/8/2007 18:51:13
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ICV

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	350474.5	91.1 %	0.05			0.06%
Yr	302075.3	94.4 %	1.25			1.32%
Ag†	502121.5	1.98 mg/L	0.004	1.98 mg/L	0.004	0.21%
	QC value within limits for Ag	Recovery = 99.05%				
Al†	56196.6	9.51 mg/L	0.017	9.51 mg/L	0.017	0.17%
	QC value within limits for Al	Recovery = 95.10%				
As†	17400.8	9.86 mg/L	0.041	9.86 mg/L	0.041	0.41%
	QC value within limits for As	Recovery = 98.64%				
B_†	145618.4	4.97 mg/L	0.001	4.97 mg/L	0.001	0.02%
	QC value within limits for B_	Recovery = 99.47%				
Ba†	663916.3	9.93 mg/L	0.011	9.93 mg/L	0.011	0.11%
	QC value within limits for Ba	Recovery = 99.26%				
Be†	11274685.9	3.96 mg/L	0.000	3.96 mg/L	0.000	0.00%
	QC value within limits for Be	Recovery = 98.98%				
Ca†	1275045.5	99.6 mg/L	0.40	99.6 mg/L	0.40	0.41%
	QC value within limits for Ca	Recovery = 99.61%				
Cd†	117894.0	4.87 mg/L	0.006	4.87 mg/L	0.006	0.12%
	QC value within limits for Cd	Recovery = 97.38%				
Co†	227554.4	9.92 mg/L	0.006	9.92 mg/L	0.006	0.06%
	QC value within limits for Co	Recovery = 99.18%				
Cr†	708009.8	9.89 mg/L	0.009	9.89 mg/L	0.009	0.10%
	QC value within limits for Cr	Recovery = 98.86%				
Cu†	3752683.1	9.89 mg/L	0.024	9.89 mg/L	0.024	0.24%
	QC value within limits for Cu	Recovery = 98.93%				
Fe†	24865.7	9.91 mg/L	0.018	9.91 mg/L	0.018	0.19%
	QC value within limits for Fe	Recovery = 99.10%				
K†	135488.3	99.4 mg/L	0.44	99.4 mg/L	0.44	0.44%
	QC value within limits for K	Recovery = 99.35%				
Mg†	756996.1	99.6 mg/L	0.35	99.6 mg/L	0.35	0.35%
	QC value within limits for Mg	Recovery = 99.58%				
Mn†	5243909.3	9.92 mg/L	0.008	9.92 mg/L	0.008	0.08%
	QC value within limits for Mn	Recovery = 99.19%				
Mo†	112218.5	9.91 mg/L	0.026	9.91 mg/L	0.026	0.26%
	QC value within limits for Mo	Recovery = 99.07%				
Na†	353895.7	99.0 mg/L	0.35	99.0 mg/L	0.35	0.36%
	QC value within limits for Na	Recovery = 99.02%				
Ni†	203202.1	9.91 mg/L	0.024	9.91 mg/L	0.024	0.24%
	QC value within limits for Ni	Recovery = 99.11%				
Pb†	43336.7	9.83 mg/L	0.019	9.83 mg/L	0.019	0.20%
	QC value within limits for Pb	Recovery = 98.34%				
Sb†	17463.6	9.66 mg/L	0.051	9.66 mg/L	0.051	0.53%
	QC value within limits for Sb	Recovery = 96.61%				
Se†	12265.5	9.86 mg/L	0.026	9.86 mg/L	0.026	0.26%
	QC value within limits for Se	Recovery = 98.56%				
Tl†	25592.9	9.86 mg/L	0.014	9.86 mg/L	0.014	0.15%
	QC value within limits for Tl	Recovery = 98.56%				
V†	1557555.0	9.97 mg/L	0.012	9.97 mg/L	0.012	0.12%
	QC value within limits for V	Recovery = 99.71%				
Zn†	434567.1	9.84 mg/L	0.010	9.84 mg/L	0.010	0.10%
	QC value within limits for Zn	Recovery = 98.41%				
Alx†	963866.1	9890 ug/L	7.0	9.89 mg/L	0.007	0.07%
	QC value within limits for Alx	Recovery = 98.90%				
Bex†	11274685.9	3960 ug/L	0.1	3.96 mg/L	0.000	0.00%
	QC value within limits for Bex	Recovery = 98.95%				

All analyte(s) passed QC.

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

Autosampler Location: 9
 Date Collected: 5/8/2007 18:54:42
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: LINEARITY

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: LINEARITY

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	338410.9	88.0 %	1.08			1.23%
Yr	291325.1	91.0 %	2.01			2.21%
Ag†	-7163.4	-0.0283 mg/L	0.00051	-0.0283 mg/L	0.00051	1.81%
	QC value within limits for Ag	Recovery = Not calculated				
Al†	-2.6	-0.00050 mg/L	0.000041	-0.00050 mg/L	0.000041	8.30%
	QC value within limits for Al	Recovery = Not calculated				
As†	-138.0	-0.0780 mg/L	0.00143	-0.0780 mg/L	0.00143	1.83%
	QC value within limits for As	Recovery = Not calculated				
B_†	666.7	0.0229 mg/L	0.00140	0.0229 mg/L	0.00140	6.10%
	QC value within limits for B_	Recovery = Not calculated				
Ba†	94.8	0.00141 mg/L	0.000149	0.00141 mg/L	0.000149	10.56%
	QC value within limits for Ba	Recovery = Not calculated				
Be†	-1144.4	-0.00040 mg/L	0.000002	-0.00040 mg/L	0.000002	0.44%
	QC value within limits for Be	Recovery = Not calculated				
Ca†	3757020.9	294 mg/L	7.0	294 mg/L	7.0	2.39%
	QC value within limits for Ca	Recovery = 97.83%				
Cd†	-23.4	0.00008 mg/L	0.000063	0.00008 mg/L	0.000063	75.86%
	QC value within limits for Cd	Recovery = Not calculated				
Co†	48.7	0.00212 mg/L	0.000211	0.00212 mg/L	0.000211	9.96%
	QC value within limits for Co	Recovery = Not calculated				
Cr†	127.8	0.00178 mg/L	0.000156	0.00178 mg/L	0.000156	8.74%
	QC value within limits for Cr	Recovery = Not calculated				
Cu†	-4685.5	-0.0123 mg/L	0.00034	-0.0123 mg/L	0.00034	2.72%
	QC value within limits for Cu	Recovery = Not calculated				
Fe†	248365.6	98.9 mg/L	0.76	98.9 mg/L	0.76	0.77%
	QC value within limits for Fe	Recovery = 98.94%				
K†	415550.5	305 mg/L	6.3	305 mg/L	6.3	2.06%
	QC value within limits for K	Recovery = 101.57%				
Mg†	1420831.4	187 mg/L	4.8	187 mg/L	4.8	2.54%
	QC value within limits for Mg	Recovery = Not calculated				
Mn†	1894.2	0.00358 mg/L	0.000099	0.00358 mg/L	0.000099	2.76%
	QC value within limits for Mn	Recovery = Not calculated				
Mo†	8.8	0.00078 mg/L	0.000093	0.00078 mg/L	0.000093	11.97%
	QC value within limits for Mo	Recovery = Not calculated				
Na†	1062276.4	297 mg/L	7.4	297 mg/L	7.4	2.49%
	QC value within limits for Na	Recovery = 99.08%				
Ni†	13.3	0.00064 mg/L	0.000400	0.00064 mg/L	0.000400	62.41%
	QC value within limits for Ni	Recovery = Not calculated				
Pb†	-15.6	-0.00355 mg/L	0.000752	-0.00355 mg/L	0.000752	21.19%
	QC value within limits for Pb	Recovery = Not calculated				
Sb†	22.4	0.0126 mg/L	0.00364	0.0126 mg/L	0.00364	28.84%
	QC value within limits for Sb	Recovery = Not calculated				
Se†	-303.3	-0.0100 mg/L	0.00327	-0.0100 mg/L	0.00327	32.56%
	QC value within limits for Se	Recovery = Not calculated				
Tl†	52.6	-0.0857 mg/L	0.00540	-0.0857 mg/L	0.00540	6.30%
	QC value within limits for Tl	Recovery = Not calculated				
V†	-959.2	-0.00246 mg/L	0.000073	-0.00246 mg/L	0.000073	2.97%
	QC value within limits for V	Recovery = Not calculated				
Zn†	1052.8	0.0240 mg/L	0.00024	0.0240 mg/L	0.00024	1.02%
	QC value within limits for Zn	Recovery = Not calculated				
Alx†	439.6	4.51 ug/L	1.195	0.00451 mg/L	0.001195	26.49%
	QC value within limits for Alx	Recovery = Not calculated				
Bex†	-1144.4	-0.402 ug/L	0.0018	-0.00040 mg/L	0.000002	0.44%
	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: 5/8/2007 18:58:32
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	345800.0	89.9 %		0.00			0.00%
Yr	296517.7	92.6 %		0.08			0.08%
Ag†	-7366.0	-0.0291 mg/L		0.00010	-0.0291 mg/L	0.00010	0.33%
	QC value within limits for Ag	Recovery = Not calculated					
Al†	1410414.3	249 mg/L		0.3	249 mg/L	0.3	0.12%
	QC value within limits for Al	Recovery = 99.74%					
As†	-379.3	-0.214 mg/L		0.0043	-0.214 mg/L	0.0043	2.02%
	QC value within limits for As	Recovery = Not calculated					
B_†	2319.7	0.0796 mg/L		0.00046	0.0796 mg/L	0.00046	0.57%
	QC value within limits for B_	Recovery = Not calculated					
Ba†	132.5	0.00198 mg/L		0.000035	0.00198 mg/L	0.000035	1.78%
	QC value within limits for Ba	Recovery = Not calculated					
Be†	-1090.4	-0.00038 mg/L		0.000008	-0.00038 mg/L	0.000008	2.04%
	QC value within limits for Be	Recovery = Not calculated					
Ca†	3264720.7	255 mg/L		1.1	255 mg/L	1.1	0.42%
	QC value within limits for Ca	Recovery = 102.02%					
Cd†	-33.1	0.00153 mg/L		0.000010	0.00153 mg/L	0.000010	0.65%
	QC value within limits for Cd	Recovery = Not calculated					
Co†	32.9	0.00144 mg/L		0.000580	0.00144 mg/L	0.000580	40.40%
	QC value within limits for Co	Recovery = Not calculated					
Cr†	-42.1	-0.00059 mg/L		0.000205	-0.00059 mg/L	0.000205	34.82%
	QC value within limits for Cr	Recovery = Not calculated					
Cu†	-4903.5	-0.0129 mg/L		0.00017	-0.0129 mg/L	0.00017	1.34%
	QC value within limits for Cu	Recovery = Not calculated					
Fe†	251753.7	100 mg/L		0.1	100 mg/L	0.1	0.13%
	QC value within limits for Fe	Recovery = 100.29%					
K†	349.9	0.257 mg/L		0.0159	0.257 mg/L	0.0159	6.21%
	QC value within limits for K	Recovery = Not calculated					
Mg†	1829983.7	241 mg/L		0.7	241 mg/L	0.7	0.31%
	QC value within limits for Mg	Recovery = 96.33%					
Mn†	1582.9	0.00299 mg/L		0.000020	0.00299 mg/L	0.000020	0.68%
	QC value within limits for Mn	Recovery = Not calculated					
Mo†	-15.1	-0.00133 mg/L		0.000766	-0.00133 mg/L	0.000766	57.44%
	QC value within limits for Mo	Recovery = Not calculated					
Na†	391.7	0.110 mg/L		0.0027	0.110 mg/L	0.0027	2.45%
	QC value within limits for Na	Recovery = Not calculated					
Ni†	-13.3	-0.00066 mg/L		0.000271	-0.00066 mg/L	0.000271	41.34%
	QC value within limits for Ni	Recovery = Not calculated					
Pb†	-171.9	-0.0390 mg/L		0.00058	-0.0390 mg/L	0.00058	1.48%
	QC value within limits for Pb	Recovery = Not calculated					
Sb†	21.1	0.0119 mg/L		0.00281	0.0119 mg/L	0.00281	23.55%
	QC value within limits for Sb	Recovery = Not calculated					
Se†	-325.0	-0.0242 mg/L		0.00271	-0.0242 mg/L	0.00271	11.20%
	QC value within limits for Se	Recovery = Not calculated					
Tl†	43.4	-0.0754 mg/L		0.00557	-0.0754 mg/L	0.00557	7.39%
	QC value within limits for Tl	Recovery = Not calculated					
V†	-993.7	-0.00264 mg/L		0.000401	-0.00264 mg/L	0.000401	15.20%
	QC value within limits for V	Recovery = Not calculated					
Zn†	889.0	0.0203 mg/L		0.00018	0.0203 mg/L	0.00018	0.91%
	QC value within limits for Zn	Recovery = Not calculated					
Alx†	Saturated2						
	Unable to evaluate QC.						
Bex†	-1090.4	-0.383 ug/L		0.0078	-0.00038 mg/L	0.000008	2.03%
	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: 5/8/2007 19:02:24
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	346434.1	90.1 %	0.48			0.53%
Yr	297392.9	92.9 %	0.92			0.99%
Ag†	45955.4	0.181 mg/L	0.0002	0.181 mg/L	0.0002	0.13%
	QC value less than the lower limit for Ag Recovery = 36.26%					
Al†	1400531.7	248 mg/L	3.7	248 mg/L	3.7	1.48%
	QC value within limits for Al Recovery = 99.04%					
As†	-382.4	-0.215 mg/L	0.0044	-0.215 mg/L	0.0044	2.05%
	QC value less than the lower limit for As Recovery = Not calculated					
B_†	2184.0	0.0744 mg/L	0.00058	0.0744 mg/L	0.00058	0.78%
	QC value greater than the upper limit for B_ Recovery = Not calculated					
Ba†	17623.3	0.263 mg/L	0.0021	0.263 mg/L	0.0021	0.78%
	QC value within limits for Ba Recovery = 105.39%					
Be†	721501.3	0.253 mg/L	0.0007	0.253 mg/L	0.0007	0.30%
	QC value within limits for Be Recovery = 101.33%					
Ca†	3244457.7	253 mg/L	4.6	253 mg/L	4.6	1.81%
	QC value within limits for Ca Recovery = 101.38%					
Cd†	11928.0	0.506 mg/L	0.0019	0.506 mg/L	0.0019	0.37%
	QC value within limits for Cd Recovery = 101.21%					
Co†	5596.7	0.244 mg/L	0.0011	0.244 mg/L	0.0011	0.45%
	QC value within limits for Co Recovery = 97.57%					
Cr†	17980.0	0.251 mg/L	0.0007	0.251 mg/L	0.0007	0.26%
	QC value within limits for Cr Recovery = 100.43%					
Cu†	95989.3	0.253 mg/L	0.0011	0.253 mg/L	0.0011	0.45%
	QC value within limits for Cu Recovery = 101.26%					
Fe†	250488.0	99.8 mg/L	0.09	99.8 mg/L	0.09	0.09%
	QC value within limits for Fe Recovery = 99.78%					
K†	153.6	0.113 mg/L	0.0068	0.113 mg/L	0.0068	6.07%
	QC value within limits for K Recovery = Not calculated					
Mg†	1820868.1	240 mg/L	3.9	240 mg/L	3.9	1.61%
	QC value within limits for Mg Recovery = 95.85%					
Mn†	140047.8	0.265 mg/L	0.0013	0.265 mg/L	0.0013	0.48%
	QC value within limits for Mn Recovery = 105.96%					
Mo†	-24.1	-0.00212 mg/L	0.000238	-0.00212 mg/L	0.000238	11.22%
	QC value within limits for Mo Recovery = Not calculated					
Na†	246.8	0.0691 mg/L	0.00057	0.0691 mg/L	0.00057	0.82%
	QC value within limits for Na Recovery = Not calculated					
Ni†	9810.8	0.479 mg/L	0.0016	0.479 mg/L	0.0016	0.33%
	QC value within limits for Ni Recovery = 95.73%					
Pb†	2049.8	0.465 mg/L	0.0018	0.465 mg/L	0.0018	0.39%
	QC value within limits for Pb Recovery = 93.03%					
Sb†	25.0	0.00949 mg/L	0.003388	0.00949 mg/L	0.003388	35.70%
	QC value within limits for Sb Recovery = Not calculated					
Se†	-337.9	-0.0358 mg/L	0.00647	-0.0358 mg/L	0.00647	18.07%
	QC value within limits for Se Recovery = Not calculated					
Tl†	28.6	-0.0791 mg/L	0.00051	-0.0791 mg/L	0.00051	0.65%
	QC value less than the lower limit for Tl Recovery = Not calculated					
V†	38874.1	0.252 mg/L	0.0010	0.252 mg/L	0.0010	0.40%
	QC value within limits for V Recovery = 100.98%					
Zn†	24192.8	0.548 mg/L	0.0028	0.548 mg/L	0.0028	0.51%
	QC value within limits for Zn Recovery = 109.66%					
Alx†	Saturated2 Unable to evaluate QC.					
Bex†	721501.3	253 ug/L	0.7	0.253 mg/L	0.0007	0.30%
	QC value within limits for Bex Recovery = 101.32%					

QC Failed. Continue with analysis.

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

Autosampler Location: 0
 Date Collected: 5/8/2007 19:06:15
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: Wash

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: Wash

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	388263.8	101	%	1.3				1.26%
Yr	322110.6	101	%	1.1				1.10%
Ag†	-3.4	-0.00001	mg/L	0.000012	-0.00001	mg/L	0.000012	92.33%
	QC value within limits for Ag	Recovery = Not calculated						
Al†	193.3	0.0342	mg/L	0.00270	0.0342	mg/L	0.00270	7.91%
	QC value within limits for Al	Recovery = Not calculated						
As†	4.4	0.00251	mg/L	0.000882	0.00251	mg/L	0.000882	35.15%
	QC value within limits for As	Recovery = Not calculated						
B_†	271.0	0.00930	mg/L	0.000054	0.00930	mg/L	0.000054	0.58%
	QC value within limits for B_	Recovery = Not calculated						
Ba†	-2.1	-0.00003	mg/L	0.000023	-0.00003	mg/L	0.000023	74.94%
	QC value within limits for Ba	Recovery = Not calculated						
Be†	289.4	0.00010	mg/L	0.000001	0.00010	mg/L	0.000001	0.82%
	QC value within limits for Be	Recovery = Not calculated						
Ca†	312.8	0.0244	mg/L	0.00464	0.0244	mg/L	0.00464	18.98%
	QC value within limits for Ca	Recovery = Not calculated						
Cd†	-1.7	-0.00010	mg/L	0.000041	-0.00010	mg/L	0.000041	39.38%
	QC value within limits for Cd	Recovery = Not calculated						
Co†	-2.3	-0.00010	mg/L	0.000052	-0.00010	mg/L	0.000052	52.11%
	QC value within limits for Co	Recovery = Not calculated						
Cr†	-14.9	-0.00021	mg/L	0.000127	-0.00021	mg/L	0.000127	60.77%
	QC value within limits for Cr	Recovery = Not calculated						
Cu†	-60.2	-0.00016	mg/L	0.000094	-0.00016	mg/L	0.000094	58.98%
	QC value within limits for Cu	Recovery = Not calculated						
Fe†	33.8	0.0135	mg/L	0.00190	0.0135	mg/L	0.00190	14.07%
	QC value within limits for Fe	Recovery = Not calculated						
K†	8.6	0.00631	mg/L	0.017633	0.00631	mg/L	0.017633	279.46%
	QC value within limits for K	Recovery = Not calculated						
Mg†	195.5	0.0257	mg/L	0.00654	0.0257	mg/L	0.00654	25.40%
	QC value within limits for Mg	Recovery = Not calculated						
Mn†	-29.0	-0.00005	mg/L	0.000013	-0.00005	mg/L	0.000013	24.42%
	QC value within limits for Mn	Recovery = Not calculated						
Mo†	0.3	0.00003	mg/L	0.000373	0.00003	mg/L	0.000373	>999.9%
	QC value within limits for Mo	Recovery = Not calculated						
Na†	44.7	0.0125	mg/L	0.01845	0.0125	mg/L	0.01845	147.49%
	QC value within limits for Na	Recovery = Not calculated						
Ni†	1.5	0.00007	mg/L	0.000013	0.00007	mg/L	0.000013	17.27%
	QC value within limits for Ni	Recovery = Not calculated						
Pb†	9.2	0.00208	mg/L	0.000739	0.00208	mg/L	0.000739	35.57%
	QC value within limits for Pb	Recovery = Not calculated						
Sb†	2.7	0.00151	mg/L	0.000281	0.00151	mg/L	0.000281	18.60%
	QC value within limits for Sb	Recovery = Not calculated						
Se†	-3.5	-0.00281	mg/L	0.002004	-0.00281	mg/L	0.002004	71.35%
	QC value within limits for Se	Recovery = Not calculated						
Tl†	12.2	0.00471	mg/L	0.002007	0.00471	mg/L	0.002007	42.64%
	QC value within limits for Tl	Recovery = Not calculated						
V†	9.9	0.00006	mg/L	0.000025	0.00006	mg/L	0.000025	40.36%
	QC value within limits for V	Recovery = Not calculated						
Zn†	9.3	0.00021	mg/L	0.000074	0.00021	mg/L	0.000074	34.95%
	QC value within limits for Zn	Recovery = Not calculated						
Alx†	768.7	7.89	ug/L	4.704	0.00789	mg/L	0.004704	59.63%
	QC value within limits for Alx	Recovery = Not calculated						
Bex†	289.4	0.102	ug/L	0.0008	0.00010	mg/L	0.000001	0.83%
	QC value within limits for Bex	Recovery = Not calculated						

All analyte(s) passed QC.

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

Autosampler Location: 12
 Date Collected: 5/8/2007 19:09:48
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: QC-25 lppm

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: QC-25 lppm

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	393624.7	102 %	0.4			0.37%
Yr	324342.9	101 %	0.0			0.02%
Ag†	242059.9	0.955 mg/L	0.0082	0.955 mg/L	0.0082	0.86%
	QC value within limits for Ag	Recovery = 95.50%				
Al†	5698.5	0.966 mg/L	0.0029	0.966 mg/L	0.0029	0.30%
	QC value within limits for Al	Recovery = 96.64%				
As†	1721.2	0.976 mg/L	0.0004	0.976 mg/L	0.0004	0.04%
	QC value within limits for As	Recovery = 97.57%				
B_†	26634.7	0.911 mg/L	0.0035	0.911 mg/L	0.0035	0.39%
	QC value within limits for B_	Recovery = 91.14%				
Ba†	69067.3	1.03 mg/L	0.005	1.03 mg/L	0.005	0.53%
	QC value within limits for Ba	Recovery = 103.26%				
Be†	2754585.8	0.967 mg/L	0.0015	0.967 mg/L	0.0015	0.16%
	QC value within limits for Be	Recovery = 96.72%				
Ca†	13205.5	1.03 mg/L	0.003	1.03 mg/L	0.003	0.25%
	QC value within limits for Ca	Recovery = 103.16%				
Cd†	22887.5	0.954 mg/L	0.0064	0.954 mg/L	0.0064	0.67%
	QC value within limits for Cd	Recovery = 95.44%				
Co†	23639.6	1.03 mg/L	0.010	1.03 mg/L	0.010	0.95%
	QC value within limits for Co	Recovery = 103.04%				
Cr†	71519.9	0.999 mg/L	0.0071	0.999 mg/L	0.0071	0.71%
	QC value within limits for Cr	Recovery = 99.87%				
Cu†	363689.6	0.959 mg/L	0.0021	0.959 mg/L	0.0021	0.22%
	QC value within limits for Cu	Recovery = 95.88%				
Fe†	2580.9	1.03 mg/L	0.001	1.03 mg/L	0.001	0.13%
	QC value within limits for Fe	Recovery = 102.86%				
K†	13016.0	9.54 mg/L	0.031	9.54 mg/L	0.031	0.32%
	QC value within limits for K	Recovery = 95.44%				
Mg†	8257.0	1.09 mg/L	0.004	1.09 mg/L	0.004	0.36%
	QC value within limits for Mg	Recovery = 108.73%				
Mn†	545340.5	1.03 mg/L	0.002	1.03 mg/L	0.002	0.15%
	QC value within limits for Mn	Recovery = 103.15%				
Mo†	10842.4	0.957 mg/L	0.0013	0.957 mg/L	0.0013	0.14%
	QC value within limits for Mo	Recovery = 95.72%				
Na†	3668.7	1.03 mg/L	0.010	1.03 mg/L	0.010	0.96%
	QC value within limits for Na	Recovery = 102.65%				
Ni†	21281.9	1.04 mg/L	0.012	1.04 mg/L	0.012	1.11%
	QC value within limits for Ni	Recovery = 103.80%				
Pb†	4593.8	1.04 mg/L	0.002	1.04 mg/L	0.002	0.17%
	QC value within limits for Pb	Recovery = 104.25%				
Sb†	1714.6	0.948 mg/L	0.0030	0.948 mg/L	0.0030	0.32%
	QC value within limits for Sb	Recovery = 94.80%				
Se†	1155.9	0.929 mg/L	0.0037	0.929 mg/L	0.0037	0.40%
	QC value within limits for Se	Recovery = 92.91%				
Tl†	2687.5	1.04 mg/L	0.003	1.04 mg/L	0.003	0.28%
	QC value within limits for Tl	Recovery = 103.84%				
V†	151809.2	0.972 mg/L	0.0086	0.972 mg/L	0.0086	0.88%
	QC value within limits for V	Recovery = 97.20%				
Zn†	44681.0	1.01 mg/L	0.009	1.01 mg/L	0.009	0.86%
	QC value within limits for Zn	Recovery = 101.17%				
Alx†	93309.2	957 ug/L	2.6	0.957 mg/L	0.0026	0.28%
	QC value within limits for Alx	Recovery = 95.74%				
Bex†	2754585.8	967 ug/L	1.5	0.967 mg/L	0.0015	0.16%
	QC value within limits for Bex	Recovery = 96.70%				

All analyte(s) passed QC.

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

Autosampler Location: 4
 Date Collected: 5/8/2007 19:14:18
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	361913.6	94.1 %	0.07			0.08%
Yr	307546.0	96.1 %	0.11			0.12%
Ag†	253058.6	0.998 mg/L	0.0028	0.998 mg/L	0.0028	0.28%
	QC value within limits for Ag Recovery = 99.84%					
Al†	28454.4	4.82 mg/L	0.035	4.82 mg/L	0.035	0.72%
	QC value within limits for Al Recovery = 96.31%					
As†	8684.5	4.92 mg/L	0.001	4.92 mg/L	0.001	0.01%
	QC value within limits for As Recovery = 98.47%					
B_f	72119.8	2.46 mg/L	0.010	2.46 mg/L	0.010	0.42%
	QC value within limits for B_ Recovery = 98.52%					
Ba†	339641.7	5.08 mg/L	0.015	5.08 mg/L	0.015	0.30%
	QC value within limits for Ba Recovery = 101.56%					
Be†	5833279.1	2.05 mg/L	0.010	2.05 mg/L	0.010	0.46%
	QC value within limits for Be Recovery = 102.42%					
Ca†	655069.9	51.2 mg/L	0.10	51.2 mg/L	0.10	0.19%
	QC value within limits for Ca Recovery = 102.35%					
Cd†	60089.0	2.48 mg/L	0.010	2.48 mg/L	0.010	0.41%
	QC value within limits for Cd Recovery = 99.32%					
Co†	116312.7	5.07 mg/L	0.008	5.07 mg/L	0.008	0.15%
	QC value within limits for Co Recovery = 101.39%					
Cr†	360293.6	5.03 mg/L	0.008	5.03 mg/L	0.008	0.15%
	QC value within limits for Cr Recovery = 100.62%					
Cu†	1893160.9	4.99 mg/L	0.020	4.99 mg/L	0.020	0.40%
	QC value within limits for Cu Recovery = 99.81%					
Fe†	12888.8	5.14 mg/L	0.022	5.14 mg/L	0.022	0.42%
	QC value within limits for Fe Recovery = 102.73%					
K†	66623.4	48.9 mg/L	0.51	48.9 mg/L	0.51	1.04%
	QC value within limits for K Recovery = 97.71%					
Mg†	395787.5	52.1 mg/L	0.06	52.1 mg/L	0.06	0.11%
	QC value within limits for Mg Recovery = 104.13%					
Mn†	2708533.7	5.12 mg/L	0.016	5.12 mg/L	0.016	0.31%
	QC value within limits for Mn Recovery = 102.47%					
Mo†	56805.7	5.02 mg/L	0.015	5.02 mg/L	0.015	0.29%
	QC value within limits for Mo Recovery = 100.30%					
Na†	179345.4	50.2 mg/L	0.12	50.2 mg/L	0.12	0.23%
	QC value within limits for Na Recovery = 100.36%					
Ni†	104778.3	5.11 mg/L	0.009	5.11 mg/L	0.009	0.18%
	QC value within limits for Ni Recovery = 102.21%					
Pb†	22536.8	5.11 mg/L	0.004	5.11 mg/L	0.004	0.07%
	QC value within limits for Pb Recovery = 102.28%					
Sb†	8858.6	4.90 mg/L	0.014	4.90 mg/L	0.014	0.28%
	QC value within limits for Sb Recovery = 98.00%					
Se†	6346.5	5.10 mg/L	0.003	5.10 mg/L	0.003	0.05%
	QC value within limits for Se Recovery = 102.00%					
Tl†	13564.4	5.22 mg/L	0.004	5.22 mg/L	0.004	0.07%
	QC value within limits for Tl Recovery = 104.48%					
V†	790050.8	5.06 mg/L	0.012	5.06 mg/L	0.012	0.23%
	QC value within limits for V Recovery = 101.15%					
Zn†	225935.2	5.12 mg/L	0.012	5.12 mg/L	0.012	0.23%
	QC value within limits for Zn Recovery = 102.33%					
Alx†	485373.1	4980 ug/L	18.8	4.98 mg/L	0.019	0.38%
	QC value within limits for Alx Recovery = 99.60%					
Bex†	5833279.1	2050 ug/L	9.5	2.05 mg/L	0.010	0.46%
	QC value within limits for Bex Recovery = 102.39%					

All analyte(s) passed QC.

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

Autosampler Location: 0
 Date Collected: 5/8/2007 19:18:23
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ICB

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	385905.6	100	%	0.1			0.06%
Yr	319812.1	99.9	%	0.94			0.94%
Ag†	-23.9	-0.00009	mg/L	0.000211	-0.00009 mg/L	0.000211	223.85%
	QC value within limits for Ag	Recovery = Not calculated					
Al†	29.0	0.00508	mg/L	0.012495	0.00508 mg/L	0.012495	245.88%
	QC value within limits for Al	Recovery = Not calculated					
As†	30.6	0.0173	mg/L	0.00210	0.0173 mg/L	0.00210	12.14%
	QC value within limits for As	Recovery = Not calculated					
B_†	534.7	0.0183	mg/L	0.00103	0.0183 mg/L	0.00103	5.61%
	QC value within limits for B_	Recovery = Not calculated					
Ba†	4.8	0.00007	mg/L	0.000000	0.00007 mg/L	0.000000	0.18%
	QC value within limits for Ba	Recovery = Not calculated					
Be†	228.1	0.00008	mg/L	0.000021	0.00008 mg/L	0.000021	26.39%
	QC value within limits for Be	Recovery = Not calculated					
Ca†	1.6	0.00013	mg/L	0.000897	0.00013 mg/L	0.000897	698.08%
	QC value within limits for Ca	Recovery = Not calculated					
Cd†	6.7	0.00005	mg/L	0.000050	0.00005 mg/L	0.000050	106.91%
	QC value within limits for Cd	Recovery = Not calculated					
Co†	-2.1	-0.00009	mg/L	0.000032	-0.00009 mg/L	0.000032	34.29%
	QC value within limits for Co	Recovery = Not calculated					
Cr†	-13.5	-0.00019	mg/L	0.000121	-0.00019 mg/L	0.000121	64.16%
	QC value within limits for Cr	Recovery = Not calculated					
Cu†	-12.0	-0.00003	mg/L	0.000263	-0.00003 mg/L	0.000263	815.75%
	QC value within limits for Cu	Recovery = Not calculated					
Fe†	4.1	0.00165	mg/L	0.001010	0.00165 mg/L	0.001010	61.06%
	QC value within limits for Fe	Recovery = Not calculated					
K†	87.6	0.0643	mg/L	0.04197	0.0643 mg/L	0.04197	65.31%
	QC value within limits for K	Recovery = Not calculated					
Mg†	8.2	0.00108	mg/L	0.000817	0.00108 mg/L	0.000817	75.95%
	QC value within limits for Mg	Recovery = Not calculated					
Mn†	39.6	0.00007	mg/L	0.000007	0.00007 mg/L	0.000007	8.87%
	QC value within limits for Mn	Recovery = Not calculated					
Mo†	13.5	0.00119	mg/L	0.000140	0.00119 mg/L	0.000140	11.73%
	QC value within limits for Mo	Recovery = Not calculated					
Na†	113.2	0.0317	mg/L	0.01051	0.0317 mg/L	0.01051	33.18%
	QC value within limits for Na	Recovery = Not calculated					
Ni†	0.1	0.00000	mg/L	0.000381	0.00000 mg/L	0.000381	>999.9%
	QC value within limits for Ni	Recovery = Not calculated					
Pb†	14.1	0.00321	mg/L	0.001388	0.00321 mg/L	0.001388	43.31%
	QC value within limits for Pb	Recovery = Not calculated					
Sb†	10.2	0.00576	mg/L	0.001013	0.00576 mg/L	0.001013	17.59%
	QC value within limits for Sb	Recovery = Not calculated					
Se†	0.1	0.00008	mg/L	0.006709	0.00008 mg/L	0.006709	>999.9%
	QC value within limits for Se	Recovery = Not calculated					
Tl†	15.1	0.00584	mg/L	0.000965	0.00584 mg/L	0.000965	16.54%
	QC value within limits for Tl	Recovery = Not calculated					
V†	-7.8	-0.00005	mg/L	0.000115	-0.00005 mg/L	0.000115	230.18%
	QC value within limits for V	Recovery = Not calculated					
Zn†	19.0	0.00043	mg/L	0.000010	0.00043 mg/L	0.000010	2.40%
	QC value within limits for Zn	Recovery = Not calculated					
Alx†	45.0	0.462	ug/L	0.0849	0.00046 mg/L	0.000085	18.38%
	QC value within limits for Alx	Recovery = Not calculated					
Bex†	228.1	0.0801	ug/L	0.02115	0.00008 mg/L	0.000021	26.41%
	QC value within limits for Bex	Recovery = Not calculated					

All analyte(s) passed QC.

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

Autosampler Location: 20
 Date Collected: 5/8/2007 19:21:58
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: MRL

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: MRL

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	391897.6	102 %	%	0.1			0.14%
Yr	324162.2	101 %	%	0.8			0.84%
Ag†	2423.6	0.00956 mg/L	mg/L	0.000445	0.00956 mg/L	0.000445	4.66%
	QC value within limits for Ag	Recovery = 95.61%					
Al†	243.9	0.0423 mg/L	mg/L	0.00305	0.0423 mg/L	0.00305	7.21%
	QC value within limits for Al	Recovery = 84.59%					
As†	178.2	0.101 mg/L	mg/L	0.0012	0.101 mg/L	0.0012	1.23%
	QC value within limits for As	Recovery = 100.68%					
B_†	1679.7	0.0575 mg/L	mg/L	0.00028	0.0575 mg/L	0.00028	0.49%
	QC value within limits for B_	Recovery = 115.02%					
Ba†	1323.2	0.0198 mg/L	mg/L	0.00009	0.0198 mg/L	0.00009	0.44%
	QC value within limits for Ba	Recovery = 98.86%					
Be†	3066.3	0.00108 mg/L	mg/L	0.000008	0.00108 mg/L	0.000008	0.76%
	QC value within limits for Be	Recovery = 107.78%					
Ca†	12832.1	1.00 mg/L	mg/L	0.006	1.00 mg/L	0.006	0.56%
	QC value within limits for Ca	Recovery = 100.25%					
Cd†	151.1	0.00519 mg/L	mg/L	0.000188	0.00519 mg/L	0.000188	3.62%
	QC value within limits for Cd	Recovery = 103.73%					
Co†	1123.1	0.0490 mg/L	mg/L	0.00034	0.0490 mg/L	0.00034	0.69%
	QC value within limits for Co	Recovery = 97.91%					
Cr†	683.1	0.00954 mg/L	mg/L	0.000053	0.00954 mg/L	0.000053	0.55%
	QC value within limits for Cr	Recovery = 95.39%					
Cu†	3458.9	0.00915 mg/L	mg/L	0.000123	0.00915 mg/L	0.000123	1.35%
	QC value within limits for Cu	Recovery = 91.47%					
Fe†	52.4	0.0209 mg/L	mg/L	0.00004	0.0209 mg/L	0.00004	0.19%
	QC value within limits for Fe	Recovery = 104.48%					
K†	1259.0	0.923 mg/L	mg/L	0.0419	0.923 mg/L	0.0419	4.53%
	QC value within limits for K	Recovery = 92.32%					
Mg†	799.5	0.105 mg/L	mg/L	0.0005	0.105 mg/L	0.0005	0.51%
	QC value within limits for Mg	Recovery = 105.19%					
Mn†	1125.6	0.00213 mg/L	mg/L	0.000005	0.00213 mg/L	0.000005	0.23%
	QC value within limits for Mn	Recovery = 106.46%					
Mo†	218.8	0.0193 mg/L	mg/L	0.00007	0.0193 mg/L	0.00007	0.34%
	QC value within limits for Mo	Recovery = 96.57%					
Na†	3521.7	0.985 mg/L	mg/L	0.0212	0.985 mg/L	0.0212	2.15%
	QC value within limits for Na	Recovery = 98.54%					
Ni†	413.9	0.0202 mg/L	mg/L	0.00012	0.0202 mg/L	0.00012	0.59%
	QC value within limits for Ni	Recovery = 100.81%					
Pb†	101.0	0.0229 mg/L	mg/L	0.00042	0.0229 mg/L	0.00042	1.84%
	QC value within limits for Pb	Recovery = 114.64%					
Sb†	80.4	0.0452 mg/L	mg/L	0.00236	0.0452 mg/L	0.00236	5.22%
	QC value within limits for Sb	Recovery = 90.30%					
Se†	114.8	0.0921 mg/L	mg/L	0.00317	0.0921 mg/L	0.00317	3.45%
	QC value within limits for Se	Recovery = 92.06%					
Tl†	285.0	0.109 mg/L	mg/L	0.0001	0.109 mg/L	0.0001	0.09%
	QC value within limits for Tl	Recovery = 109.42%					
V†	324.7	0.00212 mg/L	mg/L	0.000254	0.00212 mg/L	0.000254	11.99%
	QC value within limits for V	Recovery = 106.02%					
Zn†	870.5	0.0197 mg/L	mg/L	0.00008	0.0197 mg/L	0.00008	0.39%
	QC value within limits for Zn	Recovery = 98.55%					
Alx†	4603.3	47.2 ug/L	ug/L	0.29	0.0472 mg/L	0.00029	0.61%
	QC value within limits for Alx	Recovery = 94.47%					
Bex†	3066.3	1.08 ug/L	ug/L	0.008	0.00108 mg/L	0.000008	0.76%
	QC value within limits for Bex	Recovery = 107.65%					

All analyte(s) passed QC.

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

Autosampler Location: 0
 Date Collected: 5/8/2007 19:25:37
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: WASH

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: WASH

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	393740.1	102	%	0.7				0.72%
Yr	328110.9	102	%	0.1				0.07%
Agf	-26.3	-0.00010	mg/L	0.000166	-0.00010	mg/L	0.000166	159.57%
Alf	-11.3	-0.00201	mg/L	0.004318	-0.00201	mg/L	0.004318	215.07%
Asf	9.0	0.00507	mg/L	0.001225	0.00507	mg/L	0.001225	24.17%
B _f	294.7	0.0101	mg/L	0.00003	0.0101	mg/L	0.00003	0.30%
Bat	3.0	0.00005	mg/L	0.000064	0.00005	mg/L	0.000064	142.41%
Bet	291.6	0.00010	mg/L	0.000013	0.00010	mg/L	0.000013	13.07%
Caf	-29.1	-0.00227	mg/L	0.000049	-0.00227	mg/L	0.000049	2.17%
Cdf	-0.8	-0.00010	mg/L	0.000106	-0.00010	mg/L	0.000106	103.53%
Cof	0.5	0.00002	mg/L	0.000084	0.00002	mg/L	0.000084	378.24%
Crt	-20.4	-0.00029	mg/L	0.000059	-0.00029	mg/L	0.000059	20.74%
Cuf	-106.1	-0.00028	mg/L	0.000160	-0.00028	mg/L	0.000160	57.20%
Fef	7.4	0.00293	mg/L	0.000347	0.00293	mg/L	0.000347	11.84%
Kf	17.8	0.0130	mg/L	0.03499	0.0130	mg/L	0.03499	268.69%
Mgf	0.5	0.00007	mg/L	0.000263	0.00007	mg/L	0.000263	386.51%
Mnf	18.4	0.00003	mg/L	0.000003	0.00003	mg/L	0.000003	9.83%
Mof	3.3	0.00029	mg/L	0.000174	0.00029	mg/L	0.000174	59.22%
Naf	58.9	0.0165	mg/L	0.00369	0.0165	mg/L	0.00369	22.42%
Nif	1.0	0.00005	mg/L	0.000305	0.00005	mg/L	0.000305	620.55%
Pbf	6.5	0.00148	mg/L	0.000298	0.00148	mg/L	0.000298	20.14%
Sbf	6.2	0.00352	mg/L	0.002055	0.00352	mg/L	0.002055	58.34%
Sef	-5.5	-0.00440	mg/L	0.002231	-0.00440	mg/L	0.002231	50.68%
Tlf	13.0	0.00501	mg/L	0.000471	0.00501	mg/L	0.000471	9.41%
Vf	6.2	0.00004	mg/L	0.000002	0.00004	mg/L	0.000002	4.45%
Znf	0.1	0.00000	mg/L	0.000051	0.00000	mg/L	0.000051	>999.9%
Alxf	26.4	0.271	ug/L	0.0714	0.00027	mg/L	0.000071	26.35%
Bexf	291.6	0.102	ug/L	0.0134	0.00010	mg/L	0.000013	13.05%

Sequence No.: 13
 Sample ID: MRL6010
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 22
 Date Collected: 5/8/2007 19:29:03
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: MRL6010

Analyte	Back Pressure	Flow
All	213.0 kPa	0.65 L/min

Mean Data: MRL6010

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	399005.6	104 %		0.7			0.69%
Yr	332192.1	104 %		0.1			0.10%
Agf	2396.8	0.00946 mg/L		0.000056	0.00946 mg/L	0.000056	0.60%
Alf	308.2	0.0537 mg/L		0.00000	0.0537 mg/L	0.00000	0.00%
Ast	176.4	0.0997 mg/L		0.00145	0.0997 mg/L	0.00145	1.46%
B_f	1587.1	0.0543 mg/L		0.00030	0.0543 mg/L	0.00030	0.55%
Bat	1346.4	0.0201 mg/L		0.00009	0.0201 mg/L	0.00009	0.43%
Bet	3201.7	0.00113 mg/L		0.000003	0.00113 mg/L	0.000003	0.24%
Ca_f	13314.8	1.04 mg/L		0.000	1.04 mg/L	0.000	0.01%
Cdf	151.9	0.00524 mg/L		0.000180	0.00524 mg/L	0.000180	3.43%
Cof	1169.7	0.0510 mg/L		0.00033	0.0510 mg/L	0.00033	0.65%
Crt	698.6	0.00975 mg/L		0.000059	0.00975 mg/L	0.000059	0.60%
Cuf	3639.3	0.00962 mg/L		0.000092	0.00962 mg/L	0.000092	0.96%
Fef	59.8	0.0238 mg/L		0.00035	0.0238 mg/L	0.00035	1.46%
Kf	1319.3	0.967 mg/L		0.0076	0.967 mg/L	0.0076	0.79%
Mgf	817.6	0.108 mg/L		0.00005	0.108 mg/L	0.00005	0.43%
Mnt	1117.5	0.00211 mg/L		0.000026	0.00211 mg/L	0.000026	1.24%
Mof	220.8	0.0195 mg/L		0.00016	0.0195 mg/L	0.00016	0.81%
Naf	3601.8	1.01 mg/L		0.005	1.01 mg/L	0.005	0.49%
Nif	421.7	0.0205 mg/L		0.00013	0.0205 mg/L	0.00013	0.64%
Pbf	90.8	0.0206 mg/L		0.00015	0.0206 mg/L	0.00015	0.72%
Sbf	84.8	0.0476 mg/L		0.00244	0.0476 mg/L	0.00244	5.12%
Sef	118.8	0.0953 mg/L		0.00089	0.0953 mg/L	0.00089	0.94%
Tlf	286.7	0.110 mg/L		0.0013	0.110 mg/L	0.0013	1.14%
Vf	319.5	0.00209 mg/L		0.000180	0.00209 mg/L	0.000180	8.64%
Znf	1071.4	0.0243 mg/L		0.00018	0.0243 mg/L	0.00018	0.76%
Alxf	4836.1	49.6 ug/L		0.31	0.0496 mg/L	0.00031	0.62%
Bexf	3201.7	1.12 ug/L		0.003	0.00112 mg/L	0.000003	0.24%

Sequence No.: 14
 Sample ID: MBLANK6010
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 38
 Date Collected: 5/8/2007 19:32:50
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: MBLANK6010

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: MBLANK6010

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	394592.0	103 %	%	0.3			0.25%
Yr	334501.6	104 %	%	0.1			0.13%
Ag†	-50.8	-0.00020 mg/L	mg/L	0.000375	-0.00020 mg/L	0.000375	187.33%
Al†	-24.5	-0.00434 mg/L	mg/L	0.004726	-0.00434 mg/L	0.004726	109.01%
As†	6.2	0.00351 mg/L	mg/L	0.000964	0.00351 mg/L	0.000964	27.47%
B_†	230.8	0.00792 mg/L	mg/L	0.000109	0.00792 mg/L	0.000109	1.37%
Ba†	7.1	0.00011 mg/L	mg/L	0.000078	0.00011 mg/L	0.000078	73.80%
Be†	195.7	0.00007 mg/L	mg/L	0.000025	0.00007 mg/L	0.000025	35.76%
Cd†	407.0	0.0318 mg/L	mg/L	0.00050	0.0318 mg/L	0.00050	1.58%
Cd†	-3.7	-0.00020 mg/L	mg/L	0.000299	-0.00020 mg/L	0.000299	146.28%
Cof	0.7	0.00003 mg/L	mg/L	0.000042	0.00003 mg/L	0.000042	132.45%
Cr†	-18.5	-0.00026 mg/L	mg/L	0.000027	-0.00026 mg/L	0.000027	10.58%
Cu†	-112.2	-0.00030 mg/L	mg/L	0.000102	-0.00030 mg/L	0.000102	34.44%
Fe†	10.1	0.00403 mg/L	mg/L	0.001042	0.00403 mg/L	0.001042	25.83%
K†	-59.4	-0.0435 mg/L	mg/L	0.06550	-0.0435 mg/L	0.06550	150.44%
Mg†	7.5	0.00099 mg/L	mg/L	0.000483	0.00099 mg/L	0.000483	48.58%
Mn†	23.1	0.00004 mg/L	mg/L	0.000009	0.00004 mg/L	0.000009	21.68%
Mo†	-0.5	-0.00004 mg/L	mg/L	0.000049	-0.00004 mg/L	0.000049	113.14%
Nat	246.0	0.0688 mg/L	mg/L	0.00745	0.0688 mg/L	0.00745	10.82%
Ni†	8.9	0.00043 mg/L	mg/L	0.000203	0.00043 mg/L	0.000203	46.83%
Pb†	11.0	0.00251 mg/L	mg/L	0.000285	0.00251 mg/L	0.000285	11.37%
Sb†	6.6	0.00374 mg/L	mg/L	0.003012	0.00374 mg/L	0.003012	80.46%
Se†	-6.2	-0.00492 mg/L	mg/L	0.004355	-0.00492 mg/L	0.004355	88.45%
Tl†	21.5	0.00827 mg/L	mg/L	0.000578	0.00827 mg/L	0.000578	6.99%
V†	-2.2	-0.00002 mg/L	mg/L	0.000096	-0.00002 mg/L	0.000096	635.61%
Zn†	243.5	0.00554 mg/L	mg/L	0.000035	0.00554 mg/L	0.000035	0.64%
Alx†	132.6	1.36 ug/L	ug/L	0.050	0.00136 mg/L	0.000050	3.67%
Bex†	195.7	0.0687 ug/L	ug/L	0.02456	0.00007 mg/L	0.000025	35.74%

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

Autosampler Location: 39
 Date Collected: 5/8/2007 19:36:33
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: LCS

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: LCS

Analyte	Mean Corrected			Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.	Calib Units		Conc.	Units		
Sca	378430.2	98.4	%	1.48				1.50%
Yr	318731.4	99.6	%	0.49				0.49%
Baf	65388.0	0.978	mg/L	0.0165	0.978	mg/L	0.0165	1.68%
Ber	144679.8	0.0509	mg/L	0.00037	0.0509	mg/L	0.00037	0.73%
Caf	630733.3	49.3	mg/L	0.06	49.3	mg/L	0.06	0.11%
Cdf	4892.7	0.210	mg/L	0.0041	0.210	mg/L	0.0041	1.94%
Cof	22896.2	0.998	mg/L	0.0217	0.998	mg/L	0.0217	2.17%
Crt	70507.2	0.985	mg/L	0.0209	0.985	mg/L	0.0209	2.12%
Cuf	374254.4	0.987	mg/L	0.0056	0.987	mg/L	0.0056	0.57%
Fef	12559.0	5.00	mg/L	0.112	5.00	mg/L	0.112	2.23%
Kf	26020.5	19.1	mg/L	0.46	19.1	mg/L	0.46	2.43%
Mgf	155142.5	20.4	mg/L	0.50	20.4	mg/L	0.50	2.45%
Mnf	267666.8	0.506	mg/L	0.0029	0.506	mg/L	0.0029	0.58%
Mof	11085.0	0.979	mg/L	0.0163	0.979	mg/L	0.0163	1.66%
Nif	10274.3	0.501	mg/L	0.0086	0.501	mg/L	0.0086	1.72%
Pbf	4475.3	1.02	mg/L	0.021	1.02	mg/L	0.021	2.05%
Vf	154094.7	0.987	mg/L	0.0045	0.987	mg/L	0.0045	0.46%
Znf	45124.6	1.03	mg/L	0.021	1.03	mg/L	0.021	2.01%

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

Autosampler Location: 40
 Date Collected: 5/8/2007 19:39:03
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: LCSD

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: LCSD

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	375708.6	97.7 %	%	0.51			0.52%
Yr	320556.6	100 %	%	0.1			0.08%
Baf	65727.5	0.983 mg/L	mg/L	0.0081	0.983 mg/L	0.0081	0.83%
BeI	143985.9	0.0507 mg/L	mg/L	0.00002	0.0507 mg/L	0.00002	0.03%
CaI	642352.5	50.2 mg/L	mg/L	0.03	50.2 mg/L	0.03	0.06%
CdI	4937.6	0.212 mg/L	mg/L	0.0009	0.212 mg/L	0.0009	0.44%
CoI	22949.3	1.00 mg/L	mg/L	0.004	1.00 mg/L	0.004	0.38%
CrI	69621.9	0.972 mg/L	mg/L	0.0007	0.972 mg/L	0.0007	0.07%
CuI	374294.8	0.987 mg/L	mg/L	0.0002	0.987 mg/L	0.0002	0.02%
FeI	12464.0	4.97 mg/L	mg/L	0.035	4.97 mg/L	0.035	0.70%
KI	26725.4	19.6 mg/L	mg/L	0.14	19.6 mg/L	0.14	0.71%
MgI	157909.9	20.8 mg/L	mg/L	0.06	20.8 mg/L	0.06	0.30%
MnI	266789.6	0.505 mg/L	mg/L	0.0005	0.505 mg/L	0.0005	0.09%
MoI	11179.4	0.987 mg/L	mg/L	0.0031	0.987 mg/L	0.0031	0.32%
NiI	10325.1	0.504 mg/L	mg/L	0.0064	0.504 mg/L	0.0064	1.28%
PbI	4508.6	1.02 mg/L	mg/L	0.006	1.02 mg/L	0.006	0.63%
Vt	153618.5	0.984 mg/L	mg/L	0.0018	0.984 mg/L	0.0018	0.18%
ZnI	45334.5	1.03 mg/L	mg/L	0.006	1.03 mg/L	0.006	0.60%

Sequence No.: 17
 Sample ID: 2705020861
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 41
 Date Collected: 5/8/2007 19:42:13
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020861

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: 2705020861

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	396332.4		103 %	0.1				0.12%
Yr	332348.8		104 %	0.0				0.01%
Baf	18.2	0.00027	mg/L	0.000068	0.00054	mg/L	0.000137	25.13%
Bet	273.0	0.00010	mg/L	0.000010	0.00019	mg/L	0.000019	10.12%
Caf	2227.6	0.174	mg/L	0.0002	0.348	mg/L	0.0005	0.13%
Cdt	-0.9	-0.00004	mg/L	0.000008	-0.00007	mg/L	0.000016	21.55%
Cof	-1.1	-0.00005	mg/L	0.000056	-0.00010	mg/L	0.000111	115.00%
Crt	10.0	0.00014	mg/L	0.000018	0.00028	mg/L	0.000036	13.10%
Cuf	-41.3	-0.00011	mg/L	0.000134	-0.00022	mg/L	0.000268	122.95%
Fef	28.5	0.0113	mg/L	0.00045	0.0227	mg/L	0.00090	3.98%
Kf	-20.4	-0.0150	mg/L	0.02023	-0.0300	mg/L	0.04047	134.97%
Mgt	613.8	0.0807	mg/L	0.00008	0.161	mg/L	0.0002	0.10%
Mnf	568.2	0.00107	mg/L	0.000018	0.00215	mg/L	0.000036	1.67%
Mof	6.0	0.00053	mg/L	0.000209	0.00106	mg/L	0.000419	39.64%
Nit	5.4	0.00026	mg/L	0.000233	0.00052	mg/L	0.000467	89.40%
Pbt	3.7	0.00085	mg/L	0.001114	0.00170	mg/L	0.002229	131.12%
Vf	99.4	0.00063	mg/L	0.000059	0.00127	mg/L	0.000118	9.26%
Znf	179.7	0.00409	mg/L	0.000103	0.00819	mg/L	0.000206	2.51%

Sequence No.: 18
 Sample ID: 2705020861MS
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 42
 Date Collected: 5/8/2007 19:45:54
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020861MS

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: 2705020861MS

Analyte	Mean Corrected			Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.	Calib Units		Conc.	Units		
Sca	384352.6	99.9	%	0.03				0.03%
Yr	320920.7	100	%	1.0				0.95%
Baf	31891.8	0.477	mg/L	0.0006	0.954	mg/L	0.0012	0.12%
Bef	69534.0	0.0245	mg/L	0.00008	0.0489	mg/L	0.00015	0.31%
Caf	304560.1	23.8	mg/L	0.08	47.6	mg/L	0.17	0.36%
Cdf	2351.3	0.101	mg/L	0.0000	0.202	mg/L	0.0001	0.05%
Cof	11116.1	0.485	mg/L	0.0009	0.969	mg/L	0.0019	0.19%
Crf	33763.5	0.471	mg/L	0.0007	0.943	mg/L	0.0015	0.16%
Cuf	178917.0	0.472	mg/L	0.0001	0.943	mg/L	0.0002	0.03%
Fef	6143.1	2.45	mg/L	0.057	4.89	mg/L	0.114	2.32%
Kf	12527.9	9.19	mg/L	0.216	18.4	mg/L	0.43	2.35%
Mgf	76069.3	10.0	mg/L	0.24	20.0	mg/L	0.48	2.38%
Mnf	130418.5	0.247	mg/L	0.0003	0.493	mg/L	0.0006	0.12%
Mof	5358.2	0.473	mg/L	0.0013	0.946	mg/L	0.0026	0.27%
Nif	4997.0	0.244	mg/L	0.0003	0.488	mg/L	0.0007	0.13%
Pbf	2192.5	0.498	mg/L	0.0003	0.995	mg/L	0.0007	0.07%
Vf	74019.9	0.474	mg/L	0.0004	0.948	mg/L	0.0008	0.08%
Znf	21883.6	0.497	mg/L	0.0004	0.994	mg/L	0.0009	0.09%

Sequence No.: 19
 Sample ID: 2705020861MSD
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 43
 Date Collected: 5/8/2007 19:48:58
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020861MSD

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020861MSD

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	388336.4	101 %		1.4			1.36%
Yr	323050.9	101 %		0.2			0.24%
Baf	32301.7	0.483 mg/L		0.0068	0.966 mg/L	0.0137	1.42%
Bet	70829.3	0.0249 mg/L		0.00009	0.0498 mg/L	0.00019	0.37%
Ca†	308511.0	24.1 mg/L		0.05	48.2 mg/L	0.10	0.21%
Cd†	2380.4	0.102 mg/L		0.0012	0.204 mg/L	0.0024	1.15%
Cof	11246.3	0.490 mg/L		0.0066	0.980 mg/L	0.0133	1.35%
Crt	34384.8	0.480 mg/L		0.0008	0.960 mg/L	0.0015	0.16%
Cut	182173.5	0.480 mg/L		0.0011	0.960 mg/L	0.0022	0.23%
Fet	6260.8	2.49 mg/L		0.015	4.99 mg/L	0.029	0.59%
K†	12800.8	9.39 mg/L		0.205	18.8 mg/L	0.41	2.18%
Mgt	77628.7	10.2 mg/L		0.05	20.4 mg/L	0.10	0.50%
Mnt	132665.5	0.251 mg/L		0.0007	0.502 mg/L	0.0015	0.29%
Mo†	5415.0	0.478 mg/L		0.0056	0.956 mg/L	0.0112	1.18%
Ni†	5062.9	0.247 mg/L		0.0026	0.494 mg/L	0.0052	1.06%
Pbt	2211.7	0.502 mg/L		0.0063	1.00 mg/L	0.013	1.26%
V†	75496.2	0.483 mg/L		0.0010	0.967 mg/L	0.0021	0.22%
Znt	22187.5	0.504 mg/L		0.0070	1.01 mg/L	0.014	1.38%

Sequence No.: 25
 Sample ID: 2705020857
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 47
 Date Collected: 5/8/2007 20:10:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020857

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020857

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	344413.2		89.6 %	0.05			0.05%
Yr	302062.6		94.3 %	0.46			0.49%
Ba†	526.0	0.00790	mg/L	0.000055	0.0158	mg/L	0.70%
Be†	-749.3	-0.00026	mg/L	0.000009	-0.00052	mg/L	3.61%
Ca†	1574914.7	123	mg/L	0.6	246	mg/L	0.45%
Cd†	22.3	0.00094	mg/L	0.000073	0.00188	mg/L	7.74%
Co†	-4.2	-0.00018	mg/L	0.000274	-0.00037	mg/L	148.65%
Cr†	3248.5	0.0454	mg/L	0.00001	0.0907	mg/L	0.03%
Cu†	744.5	0.00196	mg/L	0.000085	0.00391	mg/L	4.32%
Fe†	54.9	0.0218	mg/L	0.00156	0.0437	mg/L	7.13%
K†	5632.8	4.13	mg/L	0.043	8.26	mg/L	1.03%
Mg†	535373.9	70.4	mg/L	0.31	141	mg/L	0.44%
Mn†	897.8	0.00170	mg/L	0.000022	0.00340	mg/L	1.28%
Mo†	145.6	0.0129	mg/L	0.00014	0.0257	mg/L	1.08%
Ni†	-9.3	-0.00045	mg/L	0.000078	-0.00091	mg/L	17.29%
Pb†	-24.2	-0.00548	mg/L	0.000216	-0.0110	mg/L	3.94%
V†	9960.8	0.0637	mg/L	0.00004	0.127	mg/L	0.06%
Zn†	632.4	0.0144	mg/L	0.00011	0.0288	mg/L	0.75%

Sequence No.: 26
 Sample ID: 2705020858
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 48
 Date Collected: 5/8/2007 20:15:05
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020858

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020858

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc.	Units		
Sca	341112.0		88.7 %	0.33				0.37%
Yr	296852.4		92.7 %	1.56				1.68%
Ba†	1054.3		0.0158 mg/L	0.00007	0.0315 mg/L	0.00013		0.42%
Be†	-1329.3		-0.00039 mg/L	0.000014	-0.00078 mg/L	0.000027		3.49%
Ca†	2217046.3		173 mg/L	3.6	346 mg/L	7.3		2.09%
Cd†	8.9		0.00037 mg/L	0.000072	0.00075 mg/L	0.000144		19.27%
Co†	-8.1		-0.00035 mg/L	0.000039	-0.00070 mg/L	0.000077		11.01%
Cr†	39188.6		0.547 mg/L	0.0008	1.09 mg/L	0.002		0.14%
Cu†	707.4		0.00186 mg/L	0.000045	0.00372 mg/L	0.000090		2.43%
Fe†	-2.6		-0.00104 mg/L	0.000603	-0.00208 mg/L	0.001206		57.88%
K†	14144.0		10.4 mg/L	0.05	20.7 mg/L	0.09		0.44%
Mg†	694820.7		91.4 mg/L	1.95	183 mg/L	3.9		2.14%
Mn†	2907.7		0.00550 mg/L	0.000023	0.0110 mg/L	0.00005		0.43%
Mo†	169.3		0.0149 mg/L	0.00049	0.0299 mg/L	0.00098		3.27%
Ni†	-6.6		-0.00032 mg/L	0.000004	-0.00065 mg/L	0.000007		1.13%
Pb†	-25.0		-0.00568 mg/L	0.000462	-0.0114 mg/L	0.00092		8.14%
V†	4339.5		0.0302 mg/L	0.00003	0.0604 mg/L	0.00005		0.08%
Zn†	433.6		0.00988 mg/L	0.000043	0.0198 mg/L	0.00009		0.43%

Sequence No.: 27
 Sample ID: 2705020859
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 49
 Date Collected: 5/8/2007 20:19:35
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020859

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020859

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	348405.9	90.6	%	0.58				0.64%
Yr	306821.0	95.8	%	1.01				1.06%
Baf	823.7	0.0123	mg/L	0.00000	0.0246	mg/L	0.00000	0.01%
Bet	-175.9	-0.00006	mg/L	0.000006	-0.00011	mg/L	0.000013	11.30%
Caf	1378422.0	108	mg/L	0.1	215	mg/L	0.2	0.12%
Cdf	31.2	0.00131	mg/L	0.000080	0.00262	mg/L	0.000160	6.08%
Cof	3.7	0.00016	mg/L	0.000222	0.00032	mg/L	0.000443	137.87%
Crt	2908.3	0.0406	mg/L	0.00019	0.0812	mg/L	0.00038	0.47%
Cut	801.4	0.00211	mg/L	0.000208	0.00422	mg/L	0.000416	9.85%
Fet	1431.9	0.570	mg/L	0.0069	1.14	mg/L	0.014	1.21%
Kt	6731.9	4.94	mg/L	0.054	9.87	mg/L	0.107	1.09%
Mgt	500968.7	65.9	mg/L	0.09	132	mg/L	0.2	0.14%
Mnt	19679.2	0.0372	mg/L	0.00018	0.0744	mg/L	0.00036	0.48%
Mot	55.7	0.00491	mg/L	0.000115	0.00983	mg/L	0.000230	2.34%
Nit	18.7	0.00091	mg/L	0.000065	0.00183	mg/L	0.000129	7.07%
Pbt	-9.5	-0.00216	mg/L	0.000999	-0.00432	mg/L	0.001997	46.19%
Vt	2892.5	0.0186	mg/L	0.00003	0.0373	mg/L	0.00006	0.15%
Znt	460.8	0.0105	mg/L	0.00017	0.0210	mg/L	0.00033	1.60%

Sequence No.: 28
 Sample ID: 2705020860_5X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 5X

Autosampler Location: 50
 Date Collected: 5/8/2007 20:23:56
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020860_5X

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020860_5X

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	347458.3	90.3	%	0.06				0.07%
Yr	300591.5	93.9	%	0.21				0.22%
Ba†	499.4	0.00746	mg/L	0.000094	0.0373	mg/L	0.00047	1.26%
Be†	-1665.8	-0.00024	mg/L	0.000006	-0.00122	mg/L	0.000030	2.43%
Ca†	1101031.7	86.0	mg/L	0.15	430	mg/L	0.8	0.18%
Cd†	-11.9	-0.00050	mg/L	0.000039	-0.00251	mg/L	0.000195	7.77%
Co†	-6.1	-0.00027	mg/L	0.000075	-0.00134	mg/L	0.000377	28.24%
Cr†	173626.2	2.42	mg/L	0.000	12.1	mg/L	0.00	0.00%
Cu†	456.3	0.00120	mg/L	0.000209	0.00600	mg/L	0.001045	17.40%
Fe†	-5.2	-0.00207	mg/L	0.000076	-0.0104	mg/L	0.00038	3.69%
K†	16476.6	12.1	mg/L	0.13	60.4	mg/L	0.63	1.04%
Mg†	424990.9	55.9	mg/L	0.02	279	mg/L	0.1	0.04%
Mn†	2316.1	0.00438	mg/L	0.000012	0.0219	mg/L	0.00006	0.27%
Mo†	37.4	0.00330	mg/L	0.000131	0.0165	mg/L	0.00065	3.96%
Ni†	-2.0	-0.00010	mg/L	0.000111	-0.00050	mg/L	0.000556	111.49%
Pb†	-16.0	-0.00364	mg/L	0.000974	-0.0182	mg/L	0.00487	26.79%
V†	-560.5	0.00768	mg/L	0.000146	0.0384	mg/L	0.00073	1.91%
Zn†	210.2	0.00479	mg/L	0.000019	0.0239	mg/L	0.00009	0.39%

Sequence No.: 29
 Sample ID: 2705020862
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 51
 Date Collected: 5/8/2007 20:28:21
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020862

Analyte Back Pressure Flow
 All 213.0 kPa 0.65 L/min

Mean Data: 2705020862

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Sca	350000.5	91.0	%	0.15			0.17%
Yr	303650.3	94.8	%	0.76			0.80%
Bat	648.3	0.00970	mg/L	0.000039	0.0194	mg/L	0.41%
Bet	-857.4	-0.00025	mg/L	0.000013	-0.00050	mg/L	5.07%
Caf	1409504.4	110	mg/L	0.1	220	mg/L	0.09%
Cdt	20.8	0.00087	mg/L	0.000083	0.00175	mg/L	9.50%
Cof	-11.3	-0.00049	mg/L	0.000059	-0.00099	mg/L	12.04%
Crt	25605.0	0.358	mg/L	0.0016	0.715	mg/L	0.44%
Cut	378.8	0.00099	mg/L	0.000123	0.00199	mg/L	12.39%
Fef	3053.2	1.22	mg/L	0.010	2.43	mg/L	0.81%
Kf	9670.6	7.09	mg/L	0.033	14.2	mg/L	0.47%
Mgt	464704.7	61.1	mg/L	0.00	122	mg/L	0.01%
Mnt	39663.3	0.0750	mg/L	0.000034	0.150	mg/L	0.45%
Mof	106.8	0.00943	mg/L	0.000467	0.0189	mg/L	4.95%
Nit	-11.5	-0.00056	mg/L	0.000378	-0.00113	mg/L	67.18%
Pbt	-14.6	-0.00330	mg/L	0.000595	-0.00661	mg/L	18.02%
Vf	2213.6	0.0158	mg/L	0.000004	0.0316	mg/L	0.24%
Znt	507.6	0.0116	mg/L	0.000002	0.0231	mg/L	0.14%

Sequence No.: 30
 Sample ID: 2705020863
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 52
 Date Collected: 5/8/2007 20:32:44
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020863

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: 2705020863

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	349571.0		90.9 %	0.72				0.79%
Yr	301647.3		94.2 %	0.05				0.06%
Ba	700.3	0.0105	mg/L	0.00003	0.0209	mg/L	0.00006	0.27%
Be	-283.2	-0.00009	mg/L	0.000029	-0.00019	mg/L	0.000058	30.55%
Ca	1379506.2	108	mg/L	0.2	216	mg/L	0.4	0.18%
Cd	27.4	0.00115	mg/L	0.000177	0.00231	mg/L	0.000353	15.30%
Co	-1.2	-0.00005	mg/L	0.000350	-0.00010	mg/L	0.000699	675.02%
Cr	2888.1	0.0403	mg/L	0.00051	0.0807	mg/L	0.00102	1.26%
Cu	746.5	0.00196	mg/L	0.000049	0.00393	mg/L	0.000098	2.48%
Fe	857.1	0.341	mg/L	0.0011	0.683	mg/L	0.0022	0.33%
K	6630.6	4.86	mg/L	0.003	9.72	mg/L	0.007	0.07%
Mg	496228.0	65.3	mg/L	0.02	131	mg/L	0.0	0.02%
Mn	15035.2	0.0284	mg/L	0.00002	0.0569	mg/L	0.00005	0.08%
Mo	57.4	0.00507	mg/L	0.000193	0.0101	mg/L	0.00039	3.80%
Ni	13.5	0.00066	mg/L	0.000027	0.00132	mg/L	0.000053	4.03%
Pb	-12.8	-0.00291	mg/L	0.000119	-0.00582	mg/L	0.000238	4.10%
V	2883.0	0.0186	mg/L	0.00018	0.0371	mg/L	0.00035	0.95%
Zn	480.2	0.0109	mg/L	0.00036	0.0219	mg/L	0.00073	3.34%

Sequence No.: 31
 Sample ID: 2705020864
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 53
 Date Collected: 5/8/2007 20:37:06
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020864

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020864

Analyte	Mean Corrected			Std.Dev.	Sample		RSD
	Intensity	Conc.	Calib Units		Conc.	Units	
Sca	343600.4	89.3	%	0.89			1.00%
Yr	293281.6	91.6	%	1.19			1.30%
Baf	1819.9	0.0272	mg/L	0.00035	0.0544	mg/L	1.29%
BeI	-977.5	-0.00034	mg/L	0.000002	-0.00068	mg/L	0.72%
CaI	1642054.7	128	mg/L	0.1	257	mg/L	0.11%
CdI	28.4	0.00119	mg/L	0.000026	0.00239	mg/L	2.19%
CoI	-11.6	-0.00051	mg/L	0.000091	-0.00101	mg/L	18.05%
CrI	1144.0	0.0160	mg/L	0.00030	0.0319	mg/L	1.90%
CuI	1407.6	0.00370	mg/L	0.000120	0.00740	mg/L	3.24%
FeI	-3.5	-0.00139	mg/L	0.000149	-0.00278	mg/L	10.71%
KI	14496.9	10.6	mg/L	0.13	21.3	mg/L	1.25%
MgI	373563.5	49.1	mg/L	0.18	98.3	mg/L	0.37%
MnI	28821.4	0.0545	mg/L	0.00024	0.109	mg/L	0.44%
MoI	204.7	0.0181	mg/L	0.00044	0.0361	mg/L	2.42%
NiI	-2.9	-0.00014	mg/L	0.000032	-0.00028	mg/L	22.54%
PbI	-20.5	-0.00465	mg/L	0.001496	-0.00931	mg/L	32.14%
Vl	3339.1	0.0213	mg/L	0.00018	0.0427	mg/L	0.85%
ZnI	413.9	0.00943	mg/L	0.000367	0.0189	mg/L	3.89%

Sequence No.: 34
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 5/8/2007 20:50:23
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	360788.2	93.8 %	0.43			0.46%
Yr	304412.6	95.1 %	0.58			0.61%
Ba†	338607.3	5.06 mg/L	0.022	5.06 mg/L	0.022	0.43%
	QC value within limits for Ba Recovery = 101.25%					
Be†	5843613.1	2.05 mg/L	0.005	2.05 mg/L	0.005	0.26%
	QC value within limits for Be Recovery = 102.61%					
Ca†	652815.7	51.0 mg/L	0.03	51.0 mg/L	0.03	0.05%
	QC value within limits for Ca Recovery = 102.00%					
Cd†	60076.8	2.55 mg/L	0.004	2.55 mg/L	0.004	0.14%
	QC value within limits for Cd Recovery = 101.97%					
Co†	115840.7	5.05 mg/L	0.014	5.05 mg/L	0.014	0.28%
	QC value within limits for Co Recovery = 100.98%					
Cr†	364811.0	5.09 mg/L	0.007	5.09 mg/L	0.007	0.13%
	QC value within limits for Cr Recovery = 101.88%					
Cu†	1887260.8	4.98 mg/L	0.006	4.98 mg/L	0.006	0.12%
	QC value within limits for Cu Recovery = 99.50%					
Fe†	13092.3	5.22 mg/L	0.005	5.22 mg/L	0.005	0.09%
	QC value within limits for Fe Recovery = 104.36%					
K†	67912.4	49.8 mg/L	0.27	49.8 mg/L	0.27	0.53%
	QC value within limits for K Recovery = 99.60%					
Mg†	397364.9	52.3 mg/L	0.06	52.3 mg/L	0.06	0.11%
	QC value within limits for Mg Recovery = 104.55%					
Mn†	2690971.4	5.09 mg/L	0.002	5.09 mg/L	0.002	0.05%
	QC value within limits for Mn Recovery = 101.80%					
Mo†	56847.3	5.02 mg/L	0.026	5.02 mg/L	0.026	0.52%
	QC value within limits for Mo Recovery = 100.38%					
Ni†	104929.1	5.12 mg/L	0.011	5.12 mg/L	0.011	0.22%
	QC value within limits for Ni Recovery = 102.39%					
Pb†	22689.7	5.15 mg/L	0.025	5.15 mg/L	0.025	0.48%
	QC value within limits for Pb Recovery = 102.98%					
V†	786561.6	5.04 mg/L	0.001	5.04 mg/L	0.001	0.02%
	QC value within limits for V Recovery = 100.71%					
Zn†	226232.3	5.12 mg/L	0.019	5.12 mg/L	0.019	0.36%
	QC value within limits for Zn Recovery = 102.46%					

All analyte(s) passed QC.

Sequence No.: 35
 Sample ID: CCB
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 0
 Date Collected: 5/8/2007 20:53:41
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	387935.1	101 %		0.7			0.66%
Yr	320017.2	100.0 %		0.57			0.57%
Ba†	1.1	0.00002 mg/L		0.000064	0.00002 mg/L	0.000064	377.94%
	QC value within limits for Ba	Recovery = Not calculated					
Be†	91.6	0.00003 mg/L		0.000005	0.00003 mg/L	0.000005	14.85%
	QC value within limits for Be	Recovery = Not calculated					
Ca†	5.5	0.00043 mg/L		0.001109	0.00043 mg/L	0.001109	259.52%
	QC value within limits for Ca	Recovery = Not calculated					
Cd†	3.9	0.00016 mg/L		0.000036	0.00016 mg/L	0.000036	22.16%
	QC value within limits for Cd	Recovery = Not calculated					
Co†	-3.8	-0.00017 mg/L		0.000110	-0.00017 mg/L	0.000110	65.88%
	QC value within limits for Co	Recovery = Not calculated					
Cr†	-4.3	-0.00006 mg/L		0.000051	-0.00006 mg/L	0.000051	84.49%
	QC value within limits for Cr	Recovery = Not calculated					
Cu†	-100.6	-0.00027 mg/L		0.000207	-0.00027 mg/L	0.000207	77.80%
	QC value within limits for Cu	Recovery = Not calculated					
Fe†	4.1	0.00162 mg/L		0.000388	0.00162 mg/L	0.000388	24.04%
	QC value within limits for Fe	Recovery = Not calculated					
K†	66.2	0.0486 mg/L		0.00488	0.0486 mg/L	0.00488	10.05%
	QC value within limits for K	Recovery = Not calculated					
Mg†	8.3	0.00110 mg/L		0.000503	0.00110 mg/L	0.000503	45.76%
	QC value within limits for Mg	Recovery = Not calculated					
Mn†	23.2	0.00004 mg/L		0.000030	0.00004 mg/L	0.000030	67.29%
	QC value within limits for Mn	Recovery = Not calculated					
Mo†	9.9	0.00087 mg/L		0.000140	0.00087 mg/L	0.000140	16.04%
	QC value within limits for Mo	Recovery = Not calculated					
Ni†	0.6	0.00003 mg/L		0.000055	0.00003 mg/L	0.000055	180.62%
	QC value within limits for Ni	Recovery = Not calculated					
Pb†	1.2	0.00028 mg/L		0.000474	0.00028 mg/L	0.000474	169.21%
	QC value within limits for Pb	Recovery = Not calculated					
V†	-20.5	-0.00013 mg/L		0.000039	-0.00013 mg/L	0.000039	29.86%
	QC value within limits for V	Recovery = Not calculated					
Zn†	8.1	0.00019 mg/L		0.000051	0.00019 mg/L	0.000051	27.53%
	QC value within limits for Zn	Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 36
 Sample ID: MCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 5/8/2007 20:57:07
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: MCV

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: MCV

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Sca	369773.9	96.1	%	0.01			0.01%
Yr	308678.0	96.4	%	2.41			2.50%
Ba†	169480.7	2.53	mg/L	0.023	2.53 mg/L	0.023	0.90%
	QC value within limits for Ba Recovery = 101.35%						
Be†	2904682.4	1.02	mg/L	0.003	1.02 mg/L	0.003	0.28%
	QC value within limits for Be Recovery = 102.00%						
Ca†	327347.0	25.6	mg/L	0.04	25.6 mg/L	0.04	0.16%
	QC value within limits for Ca Recovery = 102.29%						
Cd†	29596.3	1.26	mg/L	0.014	1.26 mg/L	0.014	1.10%
	QC value within limits for Cd Recovery = 100.48%						
Co†	57592.8	2.51	mg/L	0.019	2.51 mg/L	0.019	0.76%
	QC value within limits for Co Recovery = 100.41%						
Cr†	180283.6	2.52	mg/L	0.007	2.52 mg/L	0.007	0.29%
	QC value within limits for Cr Recovery = 100.70%						
Cu†	938092.9	2.47	mg/L	0.010	2.47 mg/L	0.010	0.41%
	QC value within limits for Cu Recovery = 98.92%						
Fe†	6534.7	2.60	mg/L	0.069	2.60 mg/L	0.069	2.66%
	QC value within limits for Fe Recovery = 104.17%						
K†	33564.1	24.6	mg/L	0.76	24.6 mg/L	0.76	3.09%
	QC value within limits for K Recovery = 98.45%						
Mg†	200887.1	26.4	mg/L	0.12	26.4 mg/L	0.12	0.46%
	QC value within limits for Mg Recovery = 105.70%						
Mn†	1362191.2	2.58	mg/L	0.004	2.58 mg/L	0.004	0.16%
	QC value within limits for Mn Recovery = 103.07%						
Mo†	27960.6	2.47	mg/L	0.031	2.47 mg/L	0.031	1.27%
	QC value within limits for Mo Recovery = 98.74%						
Ni†	52162.4	2.55	mg/L	0.022	2.55 mg/L	0.022	0.86%
	QC value within limits for Ni Recovery = 101.80%						
Pb†	11276.0	2.56	mg/L	0.026	2.56 mg/L	0.026	1.01%
	QC value within limits for Pb Recovery = 102.35%						
V†	391837.3	2.51	mg/L	0.004	2.51 mg/L	0.004	0.18%
	QC value within limits for V Recovery = 100.34%						
Zn†	112426.0	2.55	mg/L	0.025	2.55 mg/L	0.025	0.99%
	QC value within limits for Zn Recovery = 101.84%						
All analyte(s) passed QC.							

Sequence No.: 46
 Sample ID: MBLANK6010
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 65
 Date Collected: 5/8/2007 21:39:16
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: MBLANK6010

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: MBLANK6010

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	394885.7		103 %	0.7				0.69%
Yr	324760.5		101 %	1.5				1.52%
Baf	4.9	0.00007	mg/L	0.000119	0.00007	mg/L	0.000119	161.43%
Bet	245.6	0.00009	mg/L	0.000035	0.00009	mg/L	0.000035	40.50%
Caf	364.3	0.0285	mg/L	0.00173	0.0285	mg/L	0.00173	6.08%
Cdt	-7.0	-0.00029	mg/L	0.000103	-0.00029	mg/L	0.000103	34.84%
Cof	1.5	0.00007	mg/L	0.000079	0.00007	mg/L	0.000079	120.41%
Crt	24.1	0.00034	mg/L	0.000009	0.00034	mg/L	0.000009	2.61%
Cut	-134.9	-0.00036	mg/L	0.000112	-0.00036	mg/L	0.000112	31.50%
Fef	35.2	0.0140	mg/L	0.00028	0.0140	mg/L	0.00028	2.02%
K†	6.3	0.00462	mg/L	0.045225	0.00462	mg/L	0.045225	978.29%
Mg†	14.8	0.00196	mg/L	0.000085	0.00196	mg/L	0.000085	4.31%
Mnt	23.4	0.00004	mg/L	0.000010	0.00004	mg/L	0.000010	23.45%
Mof	-4.0	-0.00036	mg/L	0.000059	-0.00036	mg/L	0.000059	16.53%
Nit	-3.6	-0.00017	mg/L	0.000178	-0.00017	mg/L	0.000178	101.65%
Pbt	5.0	0.00113	mg/L	0.001039	0.00113	mg/L	0.001039	91.54%
V†	-0.8	0.00000	mg/L	0.000545	0.00000	mg/L	0.000545	>999.9%
Znt	185.5	0.00423	mg/L	0.000183	0.00423	mg/L	0.000183	4.33%

Sequence No.: 47
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 5/8/2007 21:42:57
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected		Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units	Units		
Sca	356296.8	92.6 %	0.31				0.33%
Yr	302051.5	94.3 %	0.77				0.81%
Ba†	336836.3	5.04 mg/L	0.017	5.04 mg/L		0.017	0.33%
	QC value within limits for Ba Recovery = 100.72%						
Be†	5849742.1	2.05 mg/L	0.020	2.05 mg/L		0.020	0.96%
	QC value within limits for Be Recovery = 102.71%						
Ca†	652820.0	51.0 mg/L	0.07	51.0 mg/L		0.07	0.14%
	QC value within limits for Ca Recovery = 102.00%						
Cd†	59850.3	2.54 mg/L	0.010	2.54 mg/L		0.010	0.40%
	QC value within limits for Cd Recovery = 101.58%						
Co†	115302.3	5.03 mg/L	0.016	5.03 mg/L		0.016	0.33%
	QC value within limits for Co Recovery = 100.51%						
Cr†	361810.5	5.05 mg/L	0.025	5.05 mg/L		0.025	0.50%
	QC value within limits for Cr Recovery = 101.04%						
Cu†	1879789.5	4.96 mg/L	0.008	4.96 mg/L		0.008	0.17%
	QC value within limits for Cu Recovery = 99.11%						
Fe†	12884.6	5.14 mg/L	0.031	5.14 mg/L		0.031	0.60%
	QC value within limits for Fe Recovery = 102.70%						
K†	66388.3	48.7 mg/L	0.40	48.7 mg/L		0.40	0.82%
	QC value within limits for K Recovery = 97.36%						
Mg†	398233.7	52.4 mg/L	0.09	52.4 mg/L		0.09	0.18%
	QC value within limits for Mg Recovery = 104.77%						
Mn†	2698125.3	5.10 mg/L	0.005	5.10 mg/L		0.005	0.09%
	QC value within limits for Mn Recovery = 102.07%						
Mo†	56576.5	4.99 mg/L	0.018	4.99 mg/L		0.018	0.36%
	QC value within limits for Mo Recovery = 99.90%						
Ni†	104143.0	5.08 mg/L	0.017	5.08 mg/L		0.017	0.34%
	QC value within limits for Ni Recovery = 101.62%						
Pb†	22453.1	5.10 mg/L	0.028	5.10 mg/L		0.028	0.55%
	QC value within limits for Pb Recovery = 101.91%						
V†	789004.9	5.05 mg/L	0.010	5.05 mg/L		0.010	0.20%
	QC value within limits for V Recovery = 101.02%						
Zn†	224985.3	5.10 mg/L	0.021	5.10 mg/L		0.021	0.42%
	QC value within limits for Zn Recovery = 101.90%						

All analyte(s) passed QC.

Sequence No.: 48
 Sample ID: CCB
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 0
 Date Collected: 5/8/2007 21:46:12
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	382542.0	99.5	%	0.96			0.96%
Yr	320625.5	100	%	0.8			0.80%
Ba†	-0.3	0.00000	mg/L	0.000009	0.00000 mg/L	0.000009	195.71%
	QC value within limits for Ba Recovery = Not calculated						
Be†	102.5	0.00004	mg/L	0.000030	0.00004 mg/L	0.000030	83.18%
	QC value within limits for Be Recovery = Not calculated						
Ca†	-21.2	-0.00165	mg/L	0.000575	-0.00165 mg/L	0.000575	34.77%
	QC value within limits for Ca Recovery = Not calculated						
Cd†	0.5	0.00002	mg/L	0.000064	0.00002 mg/L	0.000064	290.62%
	QC value within limits for Cd Recovery = Not calculated						
Co†	-2.7	-0.00012	mg/L	0.000260	-0.00012 mg/L	0.000260	220.45%
	QC value within limits for Co Recovery = Not calculated						
Cr†	16.3	0.00023	mg/L	0.000026	0.00023 mg/L	0.000026	11.42%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	-45.2	-0.00012	mg/L	0.000083	-0.00012 mg/L	0.000083	69.24%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	3.7	0.00146	mg/L	0.000007	0.00146 mg/L	0.000007	0.50%
	QC value within limits for Fe Recovery = Not calculated						
K†	-20.0	-0.0147	mg/L	0.02015	-0.0147 mg/L	0.02015	137.47%
	QC value within limits for K Recovery = Not calculated						
Mg†	4.3	0.00057	mg/L	0.000085	0.00057 mg/L	0.000085	14.95%
	QC value within limits for Mg Recovery = Not calculated						
Mn†	7.3	0.00001	mg/L	0.000007	0.00001 mg/L	0.000007	48.50%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	10.1	0.00090	mg/L	0.000160	0.00090 mg/L	0.000160	17.85%
	QC value within limits for Mo Recovery = Not calculated						
Ni†	4.2	0.00021	mg/L	0.000310	0.00021 mg/L	0.000310	151.05%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	-1.7	-0.00039	mg/L	0.000633	-0.00039 mg/L	0.000633	163.64%
	QC value within limits for Pb Recovery = Not calculated						
V†	4.8	0.00003	mg/L	0.000100	0.00003 mg/L	0.000100	313.36%
	QC value within limits for V Recovery = Not calculated						
Zn†	2.1	0.00005	mg/L	0.000012	0.00005 mg/L	0.000012	25.07%
	QC value within limits for Zn Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 49
 Sample ID: LCS
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 66
 Date Collected: 5/8/2007 21:49:40
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: LCS

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: LCS

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Sca	372473.5	96.8	%	0.96			1.00%
Yr	315833.5	98.6	%	0.54			0.55%
Ba†	63127.0	0.944	mg/L	0.0089	0.944	mg/L	0.94%
Be†	139296.2	0.0490	mg/L	0.00011	0.0490	mg/L	0.22%
Ca†	606346.3	47.4	mg/L	0.00	47.4	mg/L	0.00%
Cd†	4766.0	0.204	mg/L	0.0011	0.204	mg/L	0.51%
Co†	22088.9	0.963	mg/L	0.0070	0.963	mg/L	0.73%
Cr†	68220.9	0.953	mg/L	0.0083	0.953	mg/L	0.88%
Cu†	359072.9	0.947	mg/L	0.0002	0.947	mg/L	0.02%
Fe†	12194.5	4.86	mg/L	0.006	4.86	mg/L	0.12%
K†	25037.7	18.4	mg/L	0.05	18.4	mg/L	0.28%
Mg†	150315.4	19.8	mg/L	0.01	19.8	mg/L	0.04%
Mn†	257599.1	0.487	mg/L	0.0012	0.487	mg/L	0.24%
Mo†	10692.5	0.944	mg/L	0.0120	0.944	mg/L	1.27%
Ni†	9925.5	0.484	mg/L	0.0026	0.484	mg/L	0.54%
Pb†	4394.8	0.997	mg/L	0.0134	0.997	mg/L	1.34%
V†	148676.8	0.952	mg/L	0.0032	0.952	mg/L	0.33%
Zn†	43763.6	0.994	mg/L	0.0094	0.994	mg/L	0.94%

Sequence No.: 50
 Sample ID: LCSD
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 67
 Date Collected: 5/8/2007 21:52:09
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: LCSD

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: LCSD

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	370608.2	96.4	%	0.05				0.06%
Yr	309442.2	96.7	%	2.26				2.34%
Ba†	64505.8	0.964	mg/L	0.0014	0.964	mg/L	0.0014	0.15%
Be†	142110.9	0.0500	mg/L	0.00003	0.0500	mg/L	0.00003	0.06%
Cat	615226.2	48.1	mg/L	0.01	48.1	mg/L	0.01	0.01%
Cd†	4864.6	0.209	mg/L	0.0013	0.209	mg/L	0.0013	0.62%
Cot	22563.3	0.983	mg/L	0.0016	0.983	mg/L	0.0016	0.16%
Crt	68989.3	0.963	mg/L	0.0007	0.963	mg/L	0.0007	0.07%
Cuf	368065.3	0.970	mg/L	0.0007	0.970	mg/L	0.0007	0.07%
Fet	12597.8	5.02	mg/L	0.139	5.02	mg/L	0.139	2.78%
K†	25965.9	19.0	mg/L	0.41	19.0	mg/L	0.41	2.18%
Mgt	154975.4	20.4	mg/L	0.54	20.4	mg/L	0.54	2.66%
Mnt	263284.0	0.498	mg/L	0.0002	0.498	mg/L	0.0002	0.04%
Mot	10977.6	0.969	mg/L	0.0052	0.969	mg/L	0.0052	0.54%
Ni†	10120.0	0.494	mg/L	0.0032	0.494	mg/L	0.0032	0.65%
Pbt	4459.2	1.01	mg/L	0.005	1.01	mg/L	0.005	0.45%
V†	151768.0	0.972	mg/L	0.0007	0.972	mg/L	0.0007	0.08%
Znt	44703.3	1.02	mg/L	0.001	1.02	mg/L	0.001	0.07%

Sequence No.: 51
 Sample ID: 2705020848
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 68
 Date Collected: 5/8/2007 21:54:36
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020848

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: 2705020848

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	334766.2		87.0 %	0.98				1.13%
Yr	296188.1		92.5 %	0.45				0.49%
Ba†	1282.4		0.0192 mg/L	0.00014	0.0384 mg/L	0.00027		0.71%
Be†	-1411.4		-0.00039 mg/L	0.000005	-0.00079 mg/L	0.000010		1.22%
Ca†	1934373.7		151 mg/L	0.2	302 mg/L	0.4		0.12%
Cd†	19.3		0.00081 mg/L	0.000099	0.00162 mg/L	0.000197		12.16%
Co†	-5.7		-0.00025 mg/L	0.000428	-0.00050 mg/L	0.000856		172.02%
Cr†	52366.5		0.731 mg/L	0.0027	1.46 mg/L	0.005		0.38%
Cu†	610.0		0.00160 mg/L	0.000186	0.00320 mg/L	0.000372		11.64%
Fe†	-4.3		-0.00170 mg/L	0.000829	-0.00339 mg/L	0.001658		48.88%
K†	20832.7		15.3 mg/L	0.03	30.6 mg/L	0.05		0.17%
Mg†	567999.3		74.7 mg/L	0.05	149 mg/L	0.1		0.07%
Mn†	15911.0		0.0301 mg/L	0.00003	0.0602 mg/L	0.00006		0.10%
Mo†	195.3		0.0172 mg/L	0.00027	0.0345 mg/L	0.00053		1.55%
Ni†	-4.5		-0.00022 mg/L	0.000553	-0.00044 mg/L	0.001106		252.02%
Pb†	-26.3		-0.00597 mg/L	0.000177	-0.0119 mg/L	0.00035		2.96%
V†	3845.6		0.0279 mg/L	0.00022	0.0558 mg/L	0.00044		0.78%
Zn†	293.0		0.00668 mg/L	0.000256	0.0134 mg/L	0.00051		3.84%

Sequence No.: 52
 Sample ID: 2705020848MS
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 69
 Date Collected: 5/8/2007 21:58:59
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020848MS

Analyte	Back Pressure	Flow
All	211.0 kPa	0.65 L/min

Mean Data: 2705020848MS

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	339472.9		88.3 %	0.23				0.26%
Yr	299504.6		93.5 %	0.43				0.46%
Ba†	33874.0		0.506 mg/L	0.0016	1.01 mg/L	0.003		0.31%
Be†	70575.0		0.0249 mg/L	0.00014	0.0499 mg/L	0.00028		0.57%
Ca†	2183893.6		171 mg/L	0.4	341 mg/L	0.7		0.22%
Cd†	2555.0		0.110 mg/L	0.0001	0.219 mg/L	0.0002		0.10%
Co†	11279.9		0.492 mg/L	0.0015	0.983 mg/L	0.0030		0.31%
Cr†	85784.2		1.20 mg/L	0.004	2.40 mg/L	0.007		0.29%
Cu†	197085.6		0.520 mg/L	0.0043	1.04 mg/L	0.009		0.82%
Fe†	6336.8		2.52 mg/L	0.018	5.05 mg/L	0.036		0.72%
K†	34127.4		25.0 mg/L	0.08	50.1 mg/L	0.16		0.32%
Mg†	627529.1		82.5 mg/L	0.16	165 mg/L	0.3		0.20%
Mn†	149537.2		0.283 mg/L	0.0017	0.566 mg/L	0.0034		0.60%
Mo†	5727.4		0.506 mg/L	0.0016	1.01 mg/L	0.003		0.31%
Ni†	4961.8		0.242 mg/L	0.0004	0.484 mg/L	0.0007		0.15%
Pb†	2154.7		0.489 mg/L	0.0019	0.978 mg/L	0.0038		0.38%
V†	80676.9		0.520 mg/L	0.0017	1.04 mg/L	0.003		0.32%
Zn†	23608.2		0.536 mg/L	0.0013	1.07 mg/L	0.003		0.25%

Sequence No.: 53
 Sample ID: 2705020848MSD
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 70
 Date Collected: 5/8/2007 22:02:47
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020848MSD

Analyte Back Pressure Flow
 All 213.0 kPa 0.65 L/min

Mean Data: 2705020848MSD

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	337987.7		87.9 %	0.23			0.26%
Yr	298473.4		93.2 %	1.17			1.26%
Ba†	32714.4		0.489 mg/L	0.0015	0.978 mg/L	0.0029	0.30%
Be†	68340.1		0.0241 mg/L	0.00003	0.0483 mg/L	0.00005	0.11%
Ca†	2124128.1		166 mg/L	0.3	332 mg/L	0.6	0.18%
Cd†	2455.9		0.105 mg/L	0.0005	0.211 mg/L	0.0010	0.48%
Co†	10894.6		0.475 mg/L	0.0018	0.950 mg/L	0.0036	0.38%
Cr†	83129.0		1.16 mg/L	0.003	2.32 mg/L	0.006	0.28%
Cu†	190592.9		0.502 mg/L	0.0002	1.00 mg/L	0.000	0.03%
Fe†	6191.4		2.47 mg/L	0.048	4.93 mg/L	0.096	1.94%
K†	33324.3		24.4 mg/L	0.51	48.9 mg/L	1.02	2.08%
Mg†	611035.2		80.4 mg/L	0.27	161 mg/L	0.5	0.33%
Mn†	144836.3		0.274 mg/L	0.0006	0.548 mg/L	0.0013	0.23%
Mo†	5530.3		0.488 mg/L	0.0006	0.977 mg/L	0.0012	0.13%
Ni†	4781.5		0.233 mg/L	0.0006	0.467 mg/L	0.0013	0.28%
Pb†	2089.2		0.474 mg/L	0.0022	0.948 mg/L	0.0044	0.46%
V†	78175.6		0.504 mg/L	0.0006	1.01 mg/L	0.001	0.12%
Zn†	22584.0		0.513 mg/L	0.0007	1.03 mg/L	0.001	0.14%

Sequence No.: 54
 Sample ID: 2705020851
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 71
 Date Collected: 5/8/2007 22:06:31
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020851

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020851

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	336637.0		87.5 %	0.29				0.33%
Yr	288767.7		90.2 %	0.55				0.61%
Baf	931.0	0.0139	mg/L	0.00017	0.0278	mg/L	0.00034	1.22%
Bef	-1113.3	-0.00038	mg/L	0.000032	-0.00076	mg/L	0.000063	8.28%
Caf	2463985.2	192	mg/L	1.4	385	mg/L	2.8	0.73%
Cdf	16.9	0.00071	mg/L	0.000396	0.00142	mg/L	0.000792	55.79%
Cof	-7.1	-0.00031	mg/L	0.000136	-0.00062	mg/L	0.000272	43.64%
Crf	5420.1	0.0757	mg/L	0.00009	0.151	mg/L	0.0002	0.11%
Cuf	477.4	0.00125	mg/L	0.000156	0.00251	mg/L	0.000311	12.42%
Fef	3.3	0.00131	mg/L	0.001020	0.00263	mg/L	0.002039	77.58%
Kf	22745.9	16.7	mg/L	0.11	33.4	mg/L	0.22	0.67%
Mgf	680887.6	89.6	mg/L	0.79	179	mg/L	1.6	0.88%
Mnf	5084.2	0.00962	mg/L	0.000033	0.0192	mg/L	0.00007	0.34%
Mof	133.9	0.0118	mg/L	0.00007	0.0236	mg/L	0.00014	0.58%
Nif	-14.1	-0.00069	mg/L	0.000135	-0.00138	mg/L	0.000271	19.66%
Pbf	-18.0	-0.00407	mg/L	0.002036	-0.00815	mg/L	0.004072	49.96%
Vf	2325.3	0.0152	mg/L	0.00000	0.0303	mg/L	0.00001	0.02%
Znf	336.6	0.00767	mg/L	0.000081	0.0153	mg/L	0.00016	1.06%

Sequence No.: 55
 Sample ID: 2705020851MS
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 72
 Date Collected: 5/8/2007 22:10:59
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020851MS

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020851MS

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	335205.8		87.2 %	0.03			0.04%
Yr	293215.0		91.6 %	0.16			0.18%
Bat	33698.0		0.504 mg/L	0.0009	1.01 mg/L	0.002	0.18%
Bet	70509.7		0.0248 mg/L	0.00016	0.0496 mg/L	0.00031	0.63%
Ca†	2678381.4		209 mg/L	0.5	418 mg/L	1.0	0.25%
Cdf	2548.1		0.109 mg/L	0.0003	0.218 mg/L	0.0005	0.24%
Cof	11143.3		0.486 mg/L	0.0004	0.971 mg/L	0.0008	0.08%
Crt	39801.9		0.556 mg/L	0.0025	1.11 mg/L	0.005	0.45%
Cut	193580.8		0.510 mg/L	0.0010	1.02 mg/L	0.002	0.20%
Fet	6286.8		2.50 mg/L	0.014	5.01 mg/L	0.029	0.58%
K†	35651.4		26.1 mg/L	0.00	52.3 mg/L	0.00	0.01%
Mgt	729661.3		96.0 mg/L	0.07	192 mg/L	0.1	0.07%
Mnt	139100.9		0.263 mg/L	0.0008	0.526 mg/L	0.0015	0.29%
Mof	5697.0		0.503 mg/L	0.0002	1.01 mg/L	0.000	0.03%
Nif	4889.0		0.239 mg/L	0.0004	0.477 mg/L	0.0008	0.17%
Pbt	2160.8		0.490 mg/L	0.0002	0.981 mg/L	0.0004	0.04%
V†	79107.5		0.507 mg/L	0.0027	1.01 mg/L	0.005	0.54%
Znt	23304.2		0.529 mg/L	0.0003	1.06 mg/L	0.001	0.06%

Sequence No.: 56
 Sample ID: 2705020851MSD
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 73
 Date Collected: 5/8/2007 22:14:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020851MSD

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020851MSD

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	334268.6		86.9 %	1.07				1.24%
Yr	291542.6		91.1 %	1.31				1.43%
Baf	32547.4		0.487 mg/L	0.0075	0.973 mg/L	0.0150		1.54%
Bef	67766.5		0.0239 mg/L	0.00008	0.0477 mg/L	0.00017		0.35%
Caf	2598961.3		203 mg/L	0.0	406 mg/L	0.0		0.00%
Cdf	2459.2		0.105 mg/L	0.0010	0.211 mg/L	0.0020		0.97%
Cof	10756.0		0.469 mg/L	0.0065	0.938 mg/L	0.0131		1.39%
Crf	38458.5		0.537 mg/L	0.0016	1.07 mg/L	0.003		0.30%
Cuf	186274.5		0.491 mg/L	0.0032	0.982 mg/L	0.0065		0.66%
Fef	6139.8		2.45 mg/L	0.024	4.89 mg/L	0.048		0.99%
Kf	34971.7		25.6 mg/L	0.37	51.3 mg/L	0.75		1.46%
Mgf	708819.1		93.2 mg/L	0.06	186 mg/L	0.1		0.07%
Mnf	134022.0		0.254 mg/L	0.0002	0.507 mg/L	0.0004		0.07%
Mof	5495.3		0.485 mg/L	0.0067	0.970 mg/L	0.0134		1.39%
Nif	4719.2		0.230 mg/L	0.0031	0.461 mg/L	0.0062		1.35%
Pbf	2093.1		0.475 mg/L	0.0075	0.950 mg/L	0.0150		1.58%
Vf	76411.8		0.489 mg/L	0.0019	0.979 mg/L	0.0037		0.38%
Znf	22507.6		0.511 mg/L	0.0079	1.02 mg/L	0.016		1.54%

Sequence No.: 57
 Sample ID: 2705020837_20X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 20X

Autosampler Location: 74
 Date Collected: 5/8/2007 22:18:31
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020837_20X

Analyte Back Pressure Flow
 All 213.0 kPa 0.65 L/min

Mean Data: 2705020837_20X

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	360987.4	93.9 %		0.81			0.86%
Yr	308282.9	96.3 %		1.42			1.47%
Baf	218.1	0.00326 mg/L		0.000051	0.0651 mg/L	0.00101	1.56%
Bef	-947.3	-0.00013 mg/L		0.000005	-0.00254 mg/L	0.000104	4.09%
Ca†	621227.6	48.5 mg/L		0.07	971 mg/L	1.5	0.15%
Cdf	-10.5	-0.00044 mg/L		0.000177	-0.00882 mg/L	0.003536	40.09%
Cof	-5.5	-0.00024 mg/L		0.000081	-0.00481 mg/L	0.001628	33.86%
Crf	105031.3	1.47 mg/L		0.001	29.3 mg/L	0.01	0.04%
Cuf	120.4	0.00032 mg/L		0.000095	0.00633 mg/L	0.001908	30.12%
Fef	8.9	0.00354 mg/L		0.002342	0.0707 mg/L	0.04685	66.24%
K†	3569.2	2.62 mg/L		0.014	52.3 mg/L	0.27	0.52%
Mgf	190823.6	25.1 mg/L		0.02	502 mg/L	0.4	0.08%
Mnf	12435.5	0.0235 mg/L		0.00019	0.470 mg/L	0.0037	0.80%
Mof	10.5	0.00093 mg/L		0.000318	0.0185 mg/L	0.00636	34.33%
Nif	-2.0	-0.00010 mg/L		0.000075	-0.00198 mg/L	0.001499	75.53%
Pbf	-8.9	-0.00202 mg/L		0.000401	-0.0403 mg/L	0.00801	19.88%
V†	-694.1	0.00238 mg/L		0.000047	0.0477 mg/L	0.00093	1.95%
Znf	949.2	0.0216 mg/L		0.00008	0.433 mg/L	0.0017	0.38%

Sequence No.: 58
 Sample ID: 2705020838_10X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 10X

Autosampler Location: 75
 Date Collected: 5/8/2007 22:22:12
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020838_10X

Analyte Back Pressure Flow
 All 213.0 kPa 0.65 L/min

Mean Data: 2705020838_10X

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	348586.5	90.6 %		0.91			1.01%
Yr	291821.5	91.1 %		0.46			0.51%
Baf	466.7	0.00697 mg/L		0.000111	0.0697 mg/L	0.00111	1.59%
Be†	-2001.6	-0.00027 mg/L		0.000033	-0.00267 mg/L	0.000325	12.18%
Cat	1338155.9	105 mg/L		0.2	1050 mg/L	1.7	0.16%
Cd†	-6.1	-0.00026 mg/L		0.000127	-0.00256 mg/L	0.001266	49.38%
Co†	-2.2	-0.00010 mg/L		0.000246	-0.00096 mg/L	0.002459	257.14%
Crt	222437.3	3.11 mg/L		0.016	31.1 mg/L	0.16	0.52%
Cu†	1956.7	0.00516 mg/L		0.000179	0.0516 mg/L	0.00179	3.46%
Fe†	63.8	0.0254 mg/L		0.00150	0.254 mg/L	0.0150	5.91%
K†	6313.2	4.63 mg/L		0.049	46.3 mg/L	0.49	1.05%
Mg†	410512.3	54.0 mg/L		0.06	540 mg/L	0.6	0.11%
Mn†	5556.7	0.0105 mg/L		0.00012	0.105 mg/L	0.0012	1.16%
Mo†	17.2	0.00152 mg/L		0.000602	0.0152 mg/L	0.00602	39.59%
Ni†	-5.1	-0.00025 mg/L		0.000026	-0.00247 mg/L	0.000256	10.40%
Pb†	-23.5	-0.00534 mg/L		0.001329	-0.0534 mg/L	0.01329	24.89%
V†	-1609.3	0.00416 mg/L		0.000073	0.0416 mg/L	0.00073	1.76%
Zn†	466.2	0.0106 mg/L		0.00029	0.106 mg/L	0.0029	2.72%

Sequence No.: 59
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 5/8/2007 22:26:40
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	358982.1		93.3 %	0.07			0.07%
Yr	297601.4		93.0 %	0.77			0.83%
Ba†	340441.5		5.09 mg/L	0.013	5.09 mg/L	0.013	0.26%
	QC value within limits for Ba Recovery = 101.80%						
Be†	5846705.9		2.05 mg/L	0.008	2.05 mg/L	0.008	0.38%
	QC value within limits for Be Recovery = 102.66%						
Ca†	662663.1		51.8 mg/L	0.03	51.8 mg/L	0.03	0.05%
	QC value within limits for Ca Recovery = 103.54%						
Cd†	60432.6		2.56 mg/L	0.001	2.56 mg/L	0.001	0.04%
	QC value within limits for Cd Recovery = 102.57%						
Co†	116666.3		5.09 mg/L	0.007	5.09 mg/L	0.007	0.14%
	QC value within limits for Co Recovery = 101.70%						
Cr†	366539.1		5.12 mg/L	0.020	5.12 mg/L	0.020	0.39%
	QC value within limits for Cr Recovery = 102.37%						
Cu†	1911335.5		5.04 mg/L	0.026	5.04 mg/L	0.026	0.51%
	QC value within limits for Cu Recovery = 100.77%						
Fe†	13176.5		5.25 mg/L	0.055	5.25 mg/L	0.055	1.04%
	QC value within limits for Fe Recovery = 105.03%						
K†	68032.4		49.9 mg/L	0.34	49.9 mg/L	0.34	0.69%
	QC value within limits for K Recovery = 99.77%						
Mg†	404400.2		53.2 mg/L	0.04	53.2 mg/L	0.04	0.08%
	QC value within limits for Mg Recovery = 106.40%						
Mn†	2735641.5		5.17 mg/L	0.009	5.17 mg/L	0.009	0.17%
	QC value within limits for Mn Recovery = 103.49%						
Mo†	57124.8		5.04 mg/L	0.026	5.04 mg/L	0.026	0.51%
	QC value within limits for Mo Recovery = 100.87%						
Ni†	105377.0		5.14 mg/L	0.025	5.14 mg/L	0.025	0.49%
	QC value within limits for Ni Recovery = 102.83%						
Pb†	22766.9		5.17 mg/L	0.037	5.17 mg/L	0.037	0.71%
	QC value within limits for Pb Recovery = 103.33%						
V†	798910.9		5.11 mg/L	0.013	5.11 mg/L	0.013	0.26%
	QC value within limits for V Recovery = 102.29%						
Zn†	227644.0		5.16 mg/L	0.019	5.16 mg/L	0.019	0.37%
	QC value within limits for Zn Recovery = 103.10%						
All analyte(s) passed QC.							

Sequence No.: 60
 Sample ID: CCB
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 0
 Date Collected: 5/8/2007 22:29:56
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	379374.2	98.6	%	0.44				0.44%
Yr	316268.7	98.8	%	0.48				0.48%
Ba†	7.9	0.00012	mg/L	0.000042	0.00012	mg/L	0.000042	36.07%
	QC value within limits	for Ba	Recovery = Not calculated					
Be†	87.4	0.00003	mg/L	0.000003	0.00003	mg/L	0.000003	11.12%
	QC value within limits	for Be	Recovery = Not calculated					
Ca†	-8.0	-0.00063	mg/L	0.001390	-0.00063	mg/L	0.001390	221.13%
	QC value within limits	for Ca	Recovery = Not calculated					
Cd†	3.7	0.00016	mg/L	0.000040	0.00016	mg/L	0.000040	25.47%
	QC value within limits	for Cd	Recovery = Not calculated					
Co†	-0.2	-0.00001	mg/L	0.000110	-0.00001	mg/L	0.000110	>999.9%
	QC value within limits	for Co	Recovery = Not calculated					
Cr†	53.1	0.00074	mg/L	0.000137	0.00074	mg/L	0.000137	18.50%
	QC value within limits	for Cr	Recovery = Not calculated					
Cu†	-14.0	-0.00004	mg/L	0.000096	-0.00004	mg/L	0.000096	256.78%
	QC value within limits	for Cu	Recovery = Not calculated					
Fe†	0.5	0.00018	mg/L	0.000480	0.00018	mg/L	0.000480	260.04%
	QC value within limits	for Fe	Recovery = Not calculated					
K†	-9.3	-0.00682	mg/L	0.005485	-0.00682	mg/L	0.005485	80.38%
	QC value within limits	for K	Recovery = Not calculated					
Mg†	7.0	0.00092	mg/L	0.000586	0.00092	mg/L	0.000586	63.40%
	QC value within limits	for Mg	Recovery = Not calculated					
Mn†	3.2	0.00001	mg/L	0.000007	0.00001	mg/L	0.000007	122.13%
	QC value within limits	for Mn	Recovery = Not calculated					
Mo†	14.4	0.00127	mg/L	0.000139	0.00127	mg/L	0.000139	10.96%
	QC value within limits	for Mo	Recovery = Not calculated					
Ni†	-3.2	-0.00016	mg/L	0.000001	-0.00016	mg/L	0.000001	0.77%
	QC value within limits	for Ni	Recovery = Not calculated					
Pb†	1.9	0.00043	mg/L	0.000483	0.00043	mg/L	0.000483	111.84%
	QC value within limits	for Pb	Recovery = Not calculated					
V†	4.5	0.00003	mg/L	0.000307	0.00003	mg/L	0.000307	937.62%
	QC value within limits	for V	Recovery = Not calculated					
Zn†	3.7	0.00009	mg/L	0.000145	0.00009	mg/L	0.000145	168.34%
	QC value within limits	for Zn	Recovery = Not calculated					
All analyte(s) passed QC.								

Sequence No.: 61
 Sample ID: MCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 5/8/2007 22:33:22
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: MCV

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: MCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	370903.1	96.4 %		0.50			0.52%
Yr	306512.3	95.7 %		0.69			0.72%
Baf	170172.1	2.54 mg/L		0.008	2.54 mg/L	0.008	0.30%
	QC value within limits for Ba Recovery = 101.77%						
Be†	2903817.4	1.02 mg/L		0.002	1.02 mg/L	0.002	0.20%
	QC value within limits for Be Recovery = 101.97%						
Ca†	328028.1	25.6 mg/L		0.01	25.6 mg/L	0.01	0.03%
	QC value within limits for Ca Recovery = 102.50%						
Cd†	29724.1	1.26 mg/L		0.007	1.26 mg/L	0.007	0.55%
	QC value within limits for Cd Recovery = 100.91%						
Co†	57989.6	2.53 mg/L		0.010	2.53 mg/L	0.010	0.38%
	QC value within limits for Co Recovery = 101.10%						
Cr†	179854.7	2.51 mg/L		0.007	2.51 mg/L	0.007	0.29%
	QC value within limits for Cr Recovery = 100.46%						
Cu†	933213.2	2.46 mg/L		0.002	2.46 mg/L	0.002	0.06%
	QC value within limits for Cu Recovery = 98.41%						
Fe†	6582.3	2.62 mg/L		0.011	2.62 mg/L	0.011	0.41%
	QC value within limits for Fe Recovery = 104.93%						
K†	33632.5	24.7 mg/L		0.04	24.7 mg/L	0.04	0.16%
	QC value within limits for K Recovery = 98.65%						
Mg†	201755.4	26.5 mg/L		0.05	26.5 mg/L	0.05	0.18%
	QC value within limits for Mg Recovery = 106.16%						
Mn†	1358778.6	2.57 mg/L		0.005	2.57 mg/L	0.005	0.21%
	QC value within limits for Mn Recovery = 102.81%						
Mo†	28120.7	2.48 mg/L		0.017	2.48 mg/L	0.017	0.67%
	QC value within limits for Mo Recovery = 99.31%						
Ni†	52489.5	2.56 mg/L		0.009	2.56 mg/L	0.009	0.36%
	QC value within limits for Ni Recovery = 102.44%						
Pb†	11316.2	2.57 mg/L		0.003	2.57 mg/L	0.003	0.11%
	QC value within limits for Pb Recovery = 102.72%						
V†	390848.6	2.50 mg/L		0.004	2.50 mg/L	0.004	0.18%
	QC value within limits for V Recovery = 100.08%						
Zn†	113137.2	2.56 mg/L		0.014	2.56 mg/L	0.014	0.54%
	QC value within limits for Zn Recovery = 102.48%						

All analyte(s) passed QC.

Sequence No.: 62
 Sample ID: 2705020839_10X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 10X

Autosampler Location: 76
 Date Collected: 5/8/2007 22:36:35
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020839_10X

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020839_10X

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	357236.1	92.9	%	0.64				0.69%
Yr	297940.6	93.1	%	1.26				1.35%
Bat	320.6	0.00479	mg/L	0.000111	0.0479	mg/L	0.00111	2.32%
Bet	-1233.9	-0.00018	mg/L	0.000038	-0.00181	mg/L	0.000382	21.11%
Cat	1002617.3	78.3	mg/L	0.27	783	mg/L	2.7	0.34%
Cdt	0.6	0.00002	mg/L	0.000116	0.00024	mg/L	0.001163	484.26%
Cot	2.8	0.00012	mg/L	0.000010	0.00123	mg/L	0.000102	8.27%
Crt	128801.4	1.80	mg/L	0.005	18.0	mg/L	0.05	0.29%
Cut	643.1	0.00169	mg/L	0.000105	0.0169	mg/L	0.00105	6.19%
Fet	1645.6	0.656	mg/L	0.0089	6.56	mg/L	0.089	1.36%
Kf	6114.2	4.48	mg/L	0.060	44.8	mg/L	0.60	1.35%
Mgt	343086.3	45.1	mg/L	0.10	451	mg/L	1.0	0.22%
Mnt	11912.0	0.0225	mg/L	0.00012	0.225	mg/L	0.0012	0.54%
Mot	35.4	0.00313	mg/L	0.000190	0.0313	mg/L	0.00190	6.08%
Nit	13.6	0.00066	mg/L	0.000229	0.00663	mg/L	0.002287	34.49%
Pbt	-6.3	-0.00142	mg/L	0.000551	-0.0142	mg/L	0.00551	38.74%
Vt	376.7	0.0108	mg/L	0.00000	0.108	mg/L	0.0000	0.01%
Znt	488.4	0.0111	mg/L	0.00017	0.111	mg/L	0.0017	1.48%

Sequence No.: 63
 Sample ID: 2705020840_10X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 10X

Autosampler Location: 77
 Date Collected: 5/8/2007 22:40:55
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020840_10X

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020840_10X

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	351717.7		91.5 %	0.34				0.37%
Yr	300994.4		94.0 %	1.19				1.26%
Baf	478.0	0.00714	mg/L	0.000034	0.0714	mg/L	0.00034	0.47%
Bei	-2025.5	-0.00029	mg/L	0.000001	-0.00290	mg/L	0.000011	0.39%
Caf	1587406.6	124	mg/L	0.1	1240	mg/L	0.5	0.04%
Cdf	-13.4	-0.00056	mg/L	0.000196	-0.00563	mg/L	0.001961	34.82%
Cof	-2.6	-0.00011	mg/L	0.000095	-0.00113	mg/L	0.000951	84.42%
Crf	215244.9	3.01	mg/L	0.004	30.1	mg/L	0.04	0.12%
Cuf	199.2	0.00052	mg/L	0.000120	0.00524	mg/L	0.001203	22.96%
Fef	295.0	0.118	mg/L	0.0002	1.18	mg/L	0.002	0.19%
Kf	7089.1	5.20	mg/L	0.003	52.0	mg/L	0.03	0.06%
Mgf	468134.6	61.6	mg/L	0.03	616	mg/L	0.3	0.04%
Mnf	1664.9	0.00315	mg/L	0.000020	0.0315	mg/L	0.00020	0.65%
Mof	18.7	0.00165	mg/L	0.000208	0.0165	mg/L	0.00208	12.65%
Nif	4.7	0.00023	mg/L	0.000274	0.00228	mg/L	0.002744	120.52%
Pbf	-17.5	-0.00396	mg/L	0.000582	-0.0396	mg/L	0.00582	14.68%
Vf	-1486.0	0.00448	mg/L	0.000007	0.0448	mg/L	0.00007	0.15%
Znf	276.0	0.00629	mg/L	0.000166	0.0629	mg/L	0.00166	2.65%

Sequence No.: 64
 Sample ID: 2705020841_10X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 10X

Autosampler Location: 78
 Date Collected: 5/8/2007 22:45:16
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020841_10X

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020841_10X

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	354967.4	92.3 %		0.89				0.97%
Yr	300807.1	94.0 %		1.90				2.02%
Baf	451.8	0.00674 mg/L		0.000138	0.0674 mg/L	0.00138		2.05%
Be†	-1929.2	-0.00025 mg/L		0.000009	-0.00249 mg/L	0.000086		3.44%
Caf	1568612.5	123 mg/L		0.1	1230 mg/L	0.6		0.05%
Cdt	-12.5	-0.00053 mg/L		0.000023	-0.00528 mg/L	0.000235		4.45%
Cof	-1.8	-0.00008 mg/L		0.000231	-0.00077 mg/L	0.002311	300.47%	
Crt	218494.0	3.05 mg/L		0.005	30.5 mg/L	0.05		0.17%
Cut	273.3	0.00072 mg/L		0.000215	0.00720 mg/L	0.002149		29.86%
Fef	40.1	0.0160 mg/L		0.00103	0.160 mg/L	0.0103		6.45%
K†	6207.1	4.55 mg/L		0.086	45.5 mg/L	0.86		1.88%
Mgt	447766.7	58.9 mg/L		0.13	589 mg/L	1.3		0.21%
Mnt	1455.9	0.00275 mg/L		0.000027	0.0275 mg/L	0.00027		0.99%
Mof	13.3	0.00117 mg/L		0.000259	0.0117 mg/L	0.00259		22.07%
Nit	-6.3	-0.00031 mg/L		0.000549	-0.00309 mg/L	0.005486	177.64%	
Pbt	-30.6	-0.00694 mg/L		0.001492	-0.0694 mg/L	0.01492		21.50%
V†	-1799.6	0.00269 mg/L		0.000077	0.0269 mg/L	0.00077		2.85%
Znt	685.4	0.0156 mg/L		0.00016	0.156 mg/L	0.0016		1.02%

Sequence No.: 65

Sample ID: 2705020842_10X2705020843_

Analyst: Walter Hsieh

Initial Sample Wt:

Dilution: 10X

Autosampler Location: 79

Date Collected: 5/8/2007 22:49:42

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Nebulizer Parameters: 2705020842_10X2705020843_

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: 2705020842_10X2705020843_

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Sca	355083.5	92.3	%	0.04			0.04%
Yr	300087.1	93.7	%	0.65			0.69%
Baf	357.9	0.00534	mg/L	0.000128	0.0534	mg/L	2.40%
Bef	-1791.7	-0.00026	mg/L	0.000035	-0.00264	mg/L	13.36%
Caf	1173737.4	91.7	mg/L	0.04	917	mg/L	0.05%
Cdf	-12.3	-0.00052	mg/L	0.000062	-0.00518	mg/L	12.00%
Cof	4.1	0.00018	mg/L	0.000189	0.00177	mg/L	106.92%
Crf	186215.1	2.60	mg/L	0.002	26.0	mg/L	0.09%
Cuf	205.9	0.00054	mg/L	0.000217	0.00542	mg/L	40.07%
Fef	-3.1	-0.00122	mg/L	0.001155	-0.0122	mg/L	95.02%
Kf	4808.8	3.53	mg/L	0.020	35.3	mg/L	0.57%
Mgf	350829.4	46.1	mg/L	0.08	461	mg/L	0.18%
Mnf	2246.0	0.00425	mg/L	0.000017	0.0425	mg/L	0.40%
Mof	13.3	0.00117	mg/L	0.000146	0.0117	mg/L	12.45%
Nif	-1.0	-0.00005	mg/L	0.000088	-0.00050	mg/L	174.68%
Pbf	-19.3	-0.00437	mg/L	0.001803	-0.0437	mg/L	41.22%
Vf	-1128.6	0.00488	mg/L	0.000025	0.0488	mg/L	0.50%
Znf	222.6	0.00507	mg/L	0.000078	0.0507	mg/L	1.55%

Sequence No.: 66
 Sample ID: 2705020843_5X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 5X

Autosampler Location: 80
 Date Collected: 5/8/2007 22:54:05
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020843_5X

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: 2705020843_5X

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	340510.8	88.5	%	0.32				0.36%
Yr	293244.8	91.6	%	0.09				0.09%
Bat	755.0	0.0113	mg/L	0.00012	0.0564	mg/L	0.00060	1.06%
Bet	-2343.1	-0.00039	mg/L	0.000014	-0.00195	mg/L	0.000072	3.68%
Cat	2060642.9	161	mg/L	0.3	805	mg/L	1.3	0.16%
Cdt	-11.8	-0.00050	mg/L	0.000044	-0.00249	mg/L	0.000219	8.80%
Cot	0.8	0.00003	mg/L	0.000108	0.00016	mg/L	0.000541	329.05%
Crt	221311.8	3.09	mg/L	0.009	15.5	mg/L	0.04	0.28%
Cuf	454.7	0.00120	mg/L	0.000043	0.00599	mg/L	0.000216	3.62%
Fet	70.7	0.0282	mg/L	0.00107	0.141	mg/L	0.0053	3.80%
Kt	14133.9	10.4	mg/L	0.06	51.8	mg/L	0.29	0.55%
Mgt	639293.1	84.1	mg/L	0.18	420	mg/L	0.9	0.22%
Mnt	7514.3	0.0142	mg/L	0.00009	0.0711	mg/L	0.00044	0.62%
Mot	17.4	0.00154	mg/L	0.000186	0.00769	mg/L	0.000929	12.08%
Nit	-12.8	-0.00063	mg/L	0.000242	-0.00313	mg/L	0.001210	38.69%
Pbt	-29.8	-0.00676	mg/L	0.002451	-0.0338	mg/L	0.01226	36.28%
Vt	-927.1	0.00843	mg/L	0.000083	0.0422	mg/L	0.00041	0.98%
Znt	410.0	0.00934	mg/L	0.000176	0.0467	mg/L	0.00088	1.88%

Sequence No.: 67
 Sample ID: 2705020844_5X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 5X

Autosampler Location: 81
 Date Collected: 5/8/2007 22:58:25
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020844_5X

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020844_5X

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc.	Units		
Sca	344958.0		89.7 %	0.29				0.33%
Yr	295829.7		92.4 %	1.28				1.39%
Bat	561.8	0.00839	mg/L	0.000069	0.0420	mg/L	0.00035	0.82%
Bet	-2052.0	-0.00036	mg/L	0.000032	-0.00180	mg/L	0.000160	8.88%
Cat	1857010.1	145	mg/L	0.0	725	mg/L	0.1	0.01%
Cdf	-9.2	-0.00039	mg/L	0.000283	-0.00195	mg/L	0.001415	72.59%
Cot	-4.6	-0.00020	mg/L	0.000097	-0.00100	mg/L	0.000485	48.62%
Crt	184148.4	2.57	mg/L	0.001	12.9	mg/L	0.01	0.05%
Cuf	301.8	0.00079	mg/L	0.000160	0.00397	mg/L	0.000799	20.11%
Fet	-2.1	-0.00081	mg/L	0.001661	-0.00406	mg/L	0.008304	204.56%
Kt	9322.5	6.84	mg/L	0.092	34.2	mg/L	0.46	1.34%
Mgt	569444.3	74.9	mg/L	0.01	375	mg/L	0.0	0.01%
Mnt	3851.9	0.00729	mg/L	0.000072	0.0364	mg/L	0.00036	0.99%
Mot	19.9	0.00175	mg/L	0.000380	0.00877	mg/L	0.001901	21.68%
Nit	-7.1	-0.00035	mg/L	0.000109	-0.00173	mg/L	0.000546	31.59%
Pbt	-25.0	-0.00568	mg/L	0.000541	-0.0284	mg/L	0.00271	9.53%
Vt	-818.4	0.00672	mg/L	0.000070	0.0336	mg/L	0.00035	1.04%
Znt	979.9	0.0223	mg/L	0.00012	0.112	mg/L	0.0006	0.52%

Sequence No.: 68
 Sample ID: 2705020845_5X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 5X

Autosampler Location: 82
 Date Collected: 5/8/2007 23:02:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020845_5X

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020845_5X

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	345047.6	89.7 %		1.16			1.30%
Yr	296523.3	92.6 %		0.16			0.18%
Baf	580.5	0.00867 mg/L		0.000169	0.0434 mg/L	0.00085	1.95%
Bet	-1835.4	-0.00030 mg/L		0.000092	-0.00150 mg/L	0.000461	30.69%
Caf	1445488.2	113 mg/L		0.1	565 mg/L	0.5	0.10%
Cdt	-7.9	-0.00033 mg/L		0.000204	-0.00166 mg/L	0.001018	61.16%
Cof	-3.8	-0.00017 mg/L		0.000042	-0.00083 mg/L	0.000210	25.33%
Crt	175628.6	2.45 mg/L		0.004	12.3 mg/L	0.02	0.18%
Cut	379.3	0.00100 mg/L		0.000295	0.00499 mg/L	0.001475	29.55%
Fet	-4.6	-0.00182 mg/L		0.000875	-0.00909 mg/L	0.004376	48.14%
Kf	11652.2	8.54 mg/L		0.055	42.7 mg/L	0.28	0.65%
Mgt	494826.4	65.1 mg/L		0.04	325 mg/L	0.2	0.07%
Mnt	3776.7	0.00714 mg/L		0.000110	0.0357 mg/L	0.00055	1.53%
Mot	28.6	0.00252 mg/L		0.000585	0.0126 mg/L	0.00292	23.17%
Nif	-7.8	-0.00038 mg/L		0.000288	-0.00191 mg/L	0.001438	75.10%
Pbt	-17.5	-0.00397 mg/L		0.001297	-0.0199 mg/L	0.00649	32.65%
Vf	-395.2	0.00886 mg/L		0.000054	0.0443 mg/L	0.00027	0.61%
Znt	435.5	0.00992 mg/L		0.000056	0.0496 mg/L	0.00028	0.57%

Sequence No.: 69
 Sample ID: 2705020846
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 83
 Date Collected: 5/8/2007 23:07:13
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020846

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020846

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	324659.9	84.4	%	0.12				0.15%
Yr	288286.7	90.0	%	0.56				0.62%
Ba†	1329.1	0.0199	mg/L	0.00006	0.0397	mg/L	0.00011	0.28%
Be†	-3307.7	-0.00052	mg/L	0.000016	-0.00105	mg/L	0.000033	3.12%
Ca†	2675204.2	209	mg/L	3.6	418	mg/L	7.3	1.74%
Cd†	9.6	0.00041	mg/L	0.000125	0.00081	mg/L	0.000250	30.73%
Co†	3.8	0.00017	mg/L	0.000397	0.00033	mg/L	0.000794	238.74%
Cr†	326182.9	4.55	mg/L	0.015	9.11	mg/L	0.030	0.33%
Cu†	573.0	0.00151	mg/L	0.000129	0.00301	mg/L	0.000259	8.59%
Fe†	248.6	0.0990	mg/L	0.00031	0.198	mg/L	0.0006	0.32%
K†	27335.4	20.0	mg/L	0.04	40.1	mg/L	0.08	0.20%
Mg†	938537.0	123	mg/L	2.2	247	mg/L	4.3	1.76%
Mn†	8999.0	0.0170	mg/L	0.00008	0.0340	mg/L	0.00015	0.45%
Mo†	105.0	0.00927	mg/L	0.000112	0.0185	mg/L	0.00022	1.21%
Ni†	2.7	0.00013	mg/L	0.000390	0.00026	mg/L	0.000780	296.49%
Pb†	-26.7	-0.00606	mg/L	0.000747	-0.0121	mg/L	0.00149	12.34%
V†	-516.0	0.0179	mg/L	0.00008	0.0357	mg/L	0.00016	0.45%
Zn†	1749.1	0.0398	mg/L	0.00018	0.0797	mg/L	0.00035	0.45%

Sequence No.: 70
 Sample ID: 2705020847
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 84
 Date Collected: 5/8/2007 23:11:38
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020847

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020847

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	325397.1	84.6	%	0.22				0.26%
Yr	286132.5	89.4	%	0.31				0.34%
Bat	1146.5	0.0171	mg/L	0.00000	0.0343	mg/L	0.00000	0.00%
Bet	-2369.2	-0.00049	mg/L	0.000017	-0.00098	mg/L	0.000034	3.52%
Cat	2322976.5	181	mg/L	3.0	363	mg/L	5.9	1.63%
Cdt	14.0	0.00059	mg/L	0.000302	0.00118	mg/L	0.000605	51.27%
Cof	1.6	0.00007	mg/L	0.000036	0.00014	mg/L	0.000071	50.86%
Crt	174628.3	2.44	mg/L	0.007	4.88	mg/L	0.014	0.29%
Cut	748.2	0.00197	mg/L	0.000069	0.00393	mg/L	0.000138	3.51%
Fet	25.1	0.0100	mg/L	0.00115	0.0200	mg/L	0.00230	11.50%
Kt	26119.7	19.2	mg/L	0.08	38.3	mg/L	0.16	0.41%
Mgt	806940.9	106	mg/L	1.5	212	mg/L	2.9	1.38%
Mnt	8920.1	0.0169	mg/L	0.00006	0.0337	mg/L	0.00012	0.37%
Mot	153.2	0.0135	mg/L	0.00049	0.0270	mg/L	0.00099	3.65%
Nit	0.1	0.00000	mg/L	0.000324	0.00001	mg/L	0.000648	>999.9%
Pbt	-30.4	-0.00689	mg/L	0.000088	-0.0138	mg/L	0.00018	1.28%
Vt	553.2	0.0148	mg/L	0.00019	0.0297	mg/L	0.00038	1.27%
Znt	385.9	0.00879	mg/L	0.000022	0.0176	mg/L	0.00004	0.25%

Sequence No.: 71
 Sample ID: 2705020849
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 85
 Date Collected: 5/8/2007 23:16:05
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020849

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020849

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		RSD
	Intensity	Conc.			Conc.	Units	
Sca	335498.5	87.2	%	0.40			0.46%
Yr	294737.9	92.1	%	0.13			0.14%
Baf	1431.7	0.0214	mg/L	0.00002	0.0428	mg/L	0.08%
Bet	-1333.8	-0.00042	mg/L	0.000029	-0.00084	mg/L	6.85%
Ca†	2856358.9	223	mg/L	3.7	446	mg/L	1.67%
Cdf	9.0	0.00038	mg/L	0.000154	0.00076	mg/L	40.57%
Cot	0.6	0.00002	mg/L	0.000062	0.00005	mg/L	258.78%
Crt	23996.8	0.335	mg/L	0.0011	0.670	mg/L	0.34%
Cuf	562.9	0.00148	mg/L	0.000040	0.00296	mg/L	2.72%
Fet	-9.3	-0.00369	mg/L	0.000355	-0.00739	mg/L	9.60%
K†	25344.1	18.6	mg/L	0.11	37.2	mg/L	0.61%
Mgt	792023.0	104	mg/L	1.7	208	mg/L	1.59%
Mnt	19202.3	0.0363	mg/L	0.00011	0.0726	mg/L	0.30%
Mot	158.1	0.0140	mg/L	0.00030	0.0279	mg/L	2.14%
Nit	-6.3	-0.00031	mg/L	0.000080	-0.00062	mg/L	25.81%
Pbt	-30.0	-0.00681	mg/L	0.001110	-0.0136	mg/L	16.30%
V†	3472.9	0.0237	mg/L	0.00001	0.0474	mg/L	0.04%
Znt	217.0	0.00495	mg/L	0.000138	0.00989	mg/L	2.78%

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

Autosampler Location: 4
 Date Collected: 5/8/2007 23:20:32
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	358284.7	93.2	%	0.23			0.24%
Yr	299949.9	93.7	%	0.13			0.14%
Ba†	336249.4	5.03	mg/L	0.069	5.03 mg/L	0.069	1.37%
	QC value within limits for Ba Recovery = 100.54%						
Be†	5801641.8	2.04	mg/L	0.017	2.04 mg/L	0.017	0.84%
	QC value within limits for Be Recovery = 101.87%						
Ca†	653284.8	51.0	mg/L	0.09	51.0 mg/L	0.09	0.17%
	QC value within limits for Ca Recovery = 102.07%						
Cd†	59795.8	2.54	mg/L	0.035	2.54 mg/L	0.035	1.38%
	QC value within limits for Cd Recovery = 101.49%						
Co†	115512.4	5.03	mg/L	0.063	5.03 mg/L	0.063	1.25%
	QC value within limits for Co Recovery = 100.69%						
Cr†	360799.0	5.04	mg/L	0.051	5.04 mg/L	0.051	1.01%
	QC value within limits for Cr Recovery = 100.76%						
Cu†	1877293.7	4.95	mg/L	0.021	4.95 mg/L	0.021	0.43%
	QC value within limits for Cu Recovery = 98.98%						
Fe†	13060.6	5.21	mg/L	0.025	5.21 mg/L	0.025	0.48%
	QC value within limits for Fe Recovery = 104.10%						
K†	66948.5	49.1	mg/L	0.11	49.1 mg/L	0.11	0.23%
	QC value within limits for K Recovery = 98.18%						
Mg†	399315.5	52.5	mg/L	0.10	52.5 mg/L	0.10	0.19%
	QC value within limits for Mg Recovery = 105.06%						
Mn†	2694806.1	5.10	mg/L	0.017	5.10 mg/L	0.017	0.33%
	QC value within limits for Mn Recovery = 101.95%						
Mo†	56378.0	4.98	mg/L	0.062	4.98 mg/L	0.062	1.25%
	QC value within limits for Mo Recovery = 99.55%						
Ni†	103916.0	5.07	mg/L	0.062	5.07 mg/L	0.062	1.23%
	QC value within limits for Ni Recovery = 101.40%						
Pb†	22434.6	5.09	mg/L	0.061	5.09 mg/L	0.061	1.20%
	QC value within limits for Pb Recovery = 101.82%						
V†	786398.6	5.03	mg/L	0.007	5.03 mg/L	0.007	0.14%
	QC value within limits for V Recovery = 100.69%						
Zn†	224361.5	5.08	mg/L	0.067	5.08 mg/L	0.067	1.32%
	QC value within limits for Zn Recovery = 101.62%						

All analyte(s) passed QC.

Sequence No.: 73
 Sample ID: CCB
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 0
 Date Collected: 5/8/2007 23:23:47
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	382697.2	99.5	%	0.67				0.68%
Yr	319567.0	99.8	%	0.33				0.33%
Ba†	1.1	0.00002	mg/L	0.000021	0.00002	mg/L	0.000021	119.32%
	QC value within limits for Ba	Recovery = Not calculated						
Be†	225.8	0.00008	mg/L	0.000033	0.00008	mg/L	0.000033	41.63%
	QC value within limits for Be	Recovery = Not calculated						
Ca†	-3.2	-0.00025	mg/L	0.000038	-0.00025	mg/L	0.000038	15.34%
	QC value within limits for Ca	Recovery = Not calculated						
Cd†	3.4	0.00014	mg/L	0.000037	0.00014	mg/L	0.000037	25.34%
	QC value within limits for Cd	Recovery = Not calculated						
Co†	-0.8	-0.00004	mg/L	0.000209	-0.00004	mg/L	0.000209	584.15%
	QC value within limits for Co	Recovery = Not calculated						
Cr†	63.8	0.00089	mg/L	0.000059	0.00089	mg/L	0.000059	6.58%
	QC value within limits for Cr	Recovery = Not calculated						
Cu†	-112.4	-0.00030	mg/L	0.000102	-0.00030	mg/L	0.000102	34.22%
	QC value within limits for Cu	Recovery = Not calculated						
Fe†	1.8	0.00073	mg/L	0.000762	0.00073	mg/L	0.000762	104.38%
	QC value within limits for Fe	Recovery = Not calculated						
K†	-0.3	-0.00019	mg/L	0.024033	-0.00019	mg/L	0.024033	>999.9%
	QC value within limits for K	Recovery = Not calculated						
Mg†	11.5	0.00152	mg/L	0.000352	0.00152	mg/L	0.000352	23.24%
	QC value within limits for Mg	Recovery = Not calculated						
Mn†	-15.9	-0.00003	mg/L	0.000022	-0.00003	mg/L	0.000022	74.38%
	QC value within limits for Mn	Recovery = Not calculated						
Mo†	9.3	0.00083	mg/L	0.000024	0.00083	mg/L	0.000024	2.93%
	QC value within limits for Mo	Recovery = Not calculated						
Ni†	-2.5	-0.00012	mg/L	0.000043	-0.00012	mg/L	0.000043	34.41%
	QC value within limits for Ni	Recovery = Not calculated						
Pb†	-0.9	-0.00019	mg/L	0.000558	-0.00019	mg/L	0.000558	287.62%
	QC value within limits for Pb	Recovery = Not calculated						
V†	23.2	0.00015	mg/L	0.000251	0.00015	mg/L	0.000251	164.85%
	QC value within limits for V	Recovery = Not calculated						
Zn†	0.7	0.00002	mg/L	0.000081	0.00002	mg/L	0.000081	473.40%
	QC value within limits for Zn	Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 74
 Sample ID: 2705020850
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 86
 Date Collected: 5/8/2007 23:27:12
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020850

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020850

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	331064.2	86.1	%	0.38			0.45%
Yr	292364.7	91.3	%	0.14			0.15%
Ba†	1233.9	0.0184	mg/L	0.00005	0.0369	mg/L	0.00011 0.29%
Be†	-1463.0	-0.00049	mg/L	0.000012	-0.00098	mg/L	0.000023 2.37%
Ca†	3363014.4	263	mg/L	2.7	525	mg/L	5.4 1.04%
Cd†	5.3	0.00022	mg/L	0.000141	0.00044	mg/L	0.000282 63.63%
Co†	-3.4	-0.00015	mg/L	0.000246	-0.00030	mg/L	0.000492 166.45%
Cr†	13382.6	0.187	mg/L	0.0008	0.374	mg/L	0.0015 0.41%
Cu†	604.3	0.00159	mg/L	0.000154	0.00318	mg/L	0.000307 9.67%
Fe†	58.4	0.0233	mg/L	0.00006	0.0466	mg/L	0.00012 0.26%
K†	27900.3	20.5	mg/L	0.05	40.9	mg/L	0.10 0.26%
Mg†	947789.9	125	mg/L	1.1	249	mg/L	2.1 0.85%
Mn†	7259.5	0.0137	mg/L	0.00008	0.0275	mg/L	0.00016 0.57%
Mo†	110.2	0.00973	mg/L	0.000321	0.0195	mg/L	0.00064 3.30%
Ni†	-8.5	-0.00041	mg/L	0.000106	-0.00083	mg/L	0.000211 25.56%
Pb†	-34.5	-0.00782	mg/L	0.000164	-0.0156	mg/L	0.00033 2.10%
V†	2031.4	0.0138	mg/L	0.00010	0.0276	mg/L	0.00020 0.73%
Zn†	391.8	0.00893	mg/L	0.000183	0.0179	mg/L	0.00037 2.04%

Sequence No.: 75
 Sample ID: 2705020852
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 87
 Date Collected: 5/8/2007 23:31:39
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020852

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020852

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc.	Units		
Sca	335325.3		87.2	%	0.57			0.66%
Yr	290716.3		90.8	%	0.24			0.26%
Ba†	1564.6	0.0234	mg/L	0.00006	0.0468	mg/L	0.00013	0.27%
Be†	-1243.4	-0.00040	mg/L	0.000004	-0.00080	mg/L	0.000008	0.98%
Ca†	3032186.5	237	mg/L	0.4	474	mg/L	0.8	0.16%
Cd†	7.2	0.00030	mg/L	0.000123	0.00060	mg/L	0.000246	40.85%
Co†	-5.6	-0.00025	mg/L	0.000039	-0.00049	mg/L	0.000078	15.82%
Cr†	18963.7	0.265	mg/L	0.0012	0.530	mg/L	0.0025	0.47%
Cu†	3754.8	0.00989	mg/L	0.000012	0.0198	mg/L	0.00002	0.13%
Fe†	1771.2	0.706	mg/L	0.0002	1.41	mg/L	0.000	0.03%
K†	29988.4	22.0	mg/L	0.09	44.0	mg/L	0.19	0.43%
Mg†	798721.9	105	mg/L	0.0	210	mg/L	0.0	0.00%
Mn†	11743.6	0.0222	mg/L	0.00020	0.0444	mg/L	0.00039	0.88%
Mo†	150.0	0.0132	mg/L	0.00002	0.0265	mg/L	0.00005	0.17%
Ni†	13.8	0.00067	mg/L	0.000616	0.00135	mg/L	0.001231	91.51%
Pb†	-2.6	-0.00060	mg/L	0.001079	-0.00119	mg/L	0.002159	181.19%
V†	1682.3	0.0120	mg/L	0.00019	0.0239	mg/L	0.00037	1.56%
Zn†	6251.1	0.142	mg/L	0.0011	0.285	mg/L	0.0021	0.74%

Sequence No.: 76
 Sample ID: 2705020853
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 88
 Date Collected: 5/8/2007 23:36:03
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020853

Analyte	Back Pressure	Flow
All	213.0 kPa	0.65 L/min

Mean Data: 2705020853

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	322123.7		83.8 %	0.12				0.15%
Yr	287169.6		89.7 %	2.24				2.50%
Ba†	457.3	0.00685	mg/L	0.000040	0.0137	mg/L	0.00008	0.58%
Be†	-1995.9	-0.00060	mg/L	0.000017	-0.00119	mg/L	0.000033	2.79%
Ca†	4342463.8	339	mg/L	6.5	678	mg/L	13.0	1.92%
Cd†	7.9	0.00033	mg/L	0.000165	0.00067	mg/L	0.000329	49.11%
Co†	1.5	0.00006	mg/L	0.000130	0.00013	mg/L	0.000260	205.02%
Cr†	53461.0	0.747	mg/L	0.0007	1.49	mg/L	0.001	0.10%
Cu†	797.6	0.00209	mg/L	0.000145	0.00417	mg/L	0.000290	6.96%
Fe†	-3.3	-0.00127	mg/L	0.000338	-0.00255	mg/L	0.000676	26.54%
K†	9804.1	7.19	mg/L	0.108	14.4	mg/L	0.22	1.50%
Mg†	1023065.2	135	mg/L	2.7	269	mg/L	5.3	1.98%
Mn†	33.5	0.00006	mg/L	0.000033	0.00013	mg/L	0.000066	52.05%
Mo†	472.5	0.0417	mg/L	0.00005	0.0834	mg/L	0.00011	0.13%
Ni†	18.8	0.00092	mg/L	0.000168	0.00184	mg/L	0.000337	18.34%
Pb†	-45.3	-0.0103	mg/L	0.00108	-0.0206	mg/L	0.00215	10.47%
V†	3893.5	0.0283	mg/L	0.00011	0.0566	mg/L	0.00022	0.40%
Zn†	467.3	0.0106	mg/L	0.00003	0.0213	mg/L	0.00006	0.29%

2009/13

Sequence No.: 77
 Sample ID: 27050209854_5X
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 5X

Autosampler Location: 89
 Date Collected: 5/8/2007 23:40:32
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 27050209854_5X

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 27050209854_5X

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	340290.6		88.5 %	0.60				0.68%
Yr	294217.2		91.9 %	0.72				0.78%
Baf	572.4	0.00855	mg/L	0.000071	0.0428	mg/L	0.00035	0.83%
Bet	-2285.8	-0.00034	mg/L	0.000017	-0.00170	mg/L	0.000086	5.08%
Ca†	1946258.1	152	mg/L	0.3	760	mg/L	1.5	0.20%
Cdt	-8.2	-0.00035	mg/L	0.000075	-0.00173	mg/L	0.000374	21.66%
Cof	5.8	0.00025	mg/L	0.000205	0.00126	mg/L	0.001023	81.12%
Crf	235945.3	3.29	mg/L	0.006	16.5	mg/L	0.03	0.17%
Cuf	311.8	0.00082	mg/L	0.000094	0.00410	mg/L	0.000468	11.42%
Fef	265.8	0.106	mg/L	0.0018	0.530	mg/L	0.0092	1.74%
K†	12271.2	9.00	mg/L	0.108	45.0	mg/L	0.54	1.21%
Mgt	665600.5	87.5	mg/L	0.12	438	mg/L	0.6	0.14%
Mnt	12849.7	0.0243	mg/L	0.00015	0.122	mg/L	0.0008	0.63%
Mof	54.0	0.00477	mg/L	0.000202	0.0239	mg/L	0.00101	4.22%
Nit	13.9	0.00068	mg/L	0.000414	0.00339	mg/L	0.002070	61.06%
Pbt	-24.7	-0.00560	mg/L	0.000822	-0.0280	mg/L	0.00411	14.68%
V†	-821.4	0.0101	mg/L	0.00004	0.0503	mg/L	0.00018	0.36%
Znt	474.2	0.0108	mg/L	0.00040	0.0540	mg/L	0.00202	3.74%

Sequence No.: 78
 Sample ID: 2705020855
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 90
 Date Collected: 5/8/2007 23:44:56
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020855

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020855

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity				Conc. Units			
Sca	335558.1		87.3 %	0.07				0.08%
Yr	289350.9		90.4 %	0.21				0.23%
Ba	856.9		0.0128 mg/L	0.00001	0.0256 mg/L	0.00002		0.08%
Be	-1008.2		-0.00035 mg/L	0.000026	-0.00070 mg/L	0.000052		7.37%
Ca	2271306.1		177 mg/L	1.0	355 mg/L	2.0		0.55%
Cd	9.4		0.00039 mg/L	0.000086	0.00079 mg/L	0.000172		21.81%
Co	-13.8		-0.00060 mg/L	0.000002	-0.00120 mg/L	0.000003		0.27%
Cr	2412.6		0.0337 mg/L	0.00016	0.0674 mg/L	0.00033		0.48%
Cu	675.7		0.00178 mg/L	0.000006	0.00355 mg/L	0.000011		0.31%
Fe	87.3		0.0348 mg/L	0.00141	0.0695 mg/L	0.00283		4.07%
K	18349.1		13.5 mg/L	0.02	26.9 mg/L	0.03		0.12%
Mg	668429.7		87.9 mg/L	0.49	176 mg/L	1.0		0.55%
Mn	4841.5		0.00916 mg/L	0.000006	0.0183 mg/L	0.00001		0.07%
Mo	114.5		0.0101 mg/L	0.00031	0.0202 mg/L	0.00062		3.07%
Ni	-2.3		-0.00011 mg/L	0.000510	-0.00022 mg/L	0.001021		463.30%
Pb	-29.0		-0.00658 mg/L	0.001253	-0.0132 mg/L	0.00251		19.04%
V	3370.0		0.0216 mg/L	0.00006	0.0433 mg/L	0.00012		0.27%
Zn	973.5		0.0222 mg/L	0.00021	0.0444 mg/L	0.00042		0.96%

Sequence No.: 79
 Sample ID: 2705020856
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 2X

Autosampler Location: 91
 Date Collected: 5/8/2007 23:49:24
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: 2705020856

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: 2705020856

Analyte	Mean Corrected		Calib Units	Std.Dev.	Sample		Std.Dev.	RSD
	Intensity	Conc.			Conc.	Units		
Sca	359927.1	93.6	%	0.44				0.47%
Yr	299288.0	93.5	%	0.40				0.43%
Bat	616.7	0.00922	mg/L	0.000059	0.0184	mg/L	0.00012	0.64%
Bet	-402.1	-0.00014	mg/L	0.000043	-0.00028	mg/L	0.000086	31.07%
Cat	676945.4	52.9	mg/L	0.17	106	mg/L	0.3	0.31%
Cdt	3.4	0.00014	mg/L	0.000145	0.00029	mg/L	0.000290	101.56%
Cot	-6.8	-0.00030	mg/L	0.000021	-0.00060	mg/L	0.000042	7.01%
Crt	1584.6	0.0221	mg/L	0.00018	0.0443	mg/L	0.00036	0.82%
Cut	198.5	0.00052	mg/L	0.000012	0.00104	mg/L	0.000023	2.25%
Fet	87.5	0.0348	mg/L	0.00166	0.0697	mg/L	0.00333	4.77%
Kf	6964.6	5.11	mg/L	0.006	10.2	mg/L	0.01	0.11%
Mgt	190078.6	25.0	mg/L	0.09	50.0	mg/L	0.17	0.34%
Mnt	1729.4	0.00327	mg/L	0.000010	0.00654	mg/L	0.000021	0.32%
Mot	58.3	0.00514	mg/L	0.000379	0.0103	mg/L	0.00076	7.37%
Nit	-3.8	-0.00019	mg/L	0.000182	-0.00037	mg/L	0.000364	97.45%
Pbt	-14.9	-0.00337	mg/L	0.000687	-0.00674	mg/L	0.001374	20.37%
Vt	2330.5	0.0149	mg/L	0.00007	0.0299	mg/L	0.00014	0.47%
Znt	378.5	0.00863	mg/L	0.000082	0.0173	mg/L	0.00016	0.96%

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

Autosampler Location: 10
 Date Collected: 5/9/2007 02:06:38
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	349547.1	90.9 %	%	0.28			0.30%
Yr	290634.8	90.8 %	%	1.52			1.68%
Ba†	121.3	0.00181 mg/L	mg/L	0.000117	0.00181 mg/L	0.000117	6.48%
	QC value within limits for Ba Recovery = Not calculated						
Be†	-1010.8	-0.00035 mg/L	mg/L	0.000002	-0.00035 mg/L	0.000002	0.60%
	QC value within limits for Be Recovery = Not calculated						
Ca†	3237377.6	253 mg/L	mg/L	2.9	253 mg/L	2.9	1.15%
	QC value within limits for Ca Recovery = 101.16%						
Cd†	-37.2	-0.00156 mg/L	mg/L	0.000313	-0.00156 mg/L	0.000313	20.04%
	QC value within limits for Cd Recovery = Not calculated						
Co†	33.6	0.00147 mg/L	mg/L	0.000178	0.00147 mg/L	0.000178	12.17%
	QC value within limits for Co Recovery = Not calculated						
Cr†	-32.4	-0.00045 mg/L	mg/L	0.000042	-0.00045 mg/L	0.000042	9.28%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	-4838.8	-0.0127 mg/L	mg/L	0.00006	-0.0127 mg/L	0.00006	0.44%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	252939.1	101 mg/L	mg/L	1.4	101 mg/L	1.4	1.43%
	QC value within limits for Fe Recovery = 100.76%						
K†	119.4	0.0876 mg/L	mg/L	0.01074	0.0876 mg/L	0.01074	12.26%
	QC value within limits for K Recovery = Not calculated						
Mg†	1842753.5	243 mg/L	mg/L	3.5	243 mg/L	3.5	1.45%
	QC value within limits for Mg Recovery = 97.00%						
Mn†	1580.0	0.00299 mg/L	mg/L	0.000005	0.00299 mg/L	0.000005	0.16%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	-27.2	-0.00240 mg/L	mg/L	0.000133	-0.00240 mg/L	0.000133	5.52%
	QC value within limits for Mo Recovery = Not calculated						
Ni†	-16.9	-0.00082 mg/L	mg/L	0.000137	-0.00082 mg/L	0.000137	16.59%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	-151.7	-0.0344 mg/L	mg/L	0.00041	-0.0344 mg/L	0.00041	1.19%
	QC value within limits for Pb Recovery = Not calculated						
V†	-874.3	-0.00186 mg/L	mg/L	0.000169	-0.00186 mg/L	0.000169	9.09%
	QC value within limits for V Recovery = Not calculated						
Zn†	823.0	0.0188 mg/L	mg/L	0.00010	0.0188 mg/L	0.00010	0.52%
	QC value within limits for Zn Recovery = Not calculated						

All analyte(s) passed QC.

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

Autosampler Location: 11
 Date Collected: 5/9/2007 02:10:24
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	213.0 kPa	0.65 L/min

Mean Data: ICSAB

Analyte	Mean Corrected		Calib Conc. Units	Std.Dev.	Sample		RSD
	Intensity				Conc. Units	Std.Dev.	
Sca	345846.4		89.9 %	0.02			0.03%
Yr	289493.3		90.4 %	0.78			0.87%
Baf	17226.2		0.258 mg/L	0.0003	0.258 mg/L	0.0003	0.12%
	QC value within limits for Ba Recovery = 103.02%						
Be†	709782.7		0.249 mg/L	0.0000	0.249 mg/L	0.0000	0.02%
	QC value within limits for Be Recovery = 99.68%						
Ca†	3275459.3		256 mg/L	0.8	256 mg/L	0.8	0.30%
	QC value within limits for Ca Recovery = 102.35%						
Cd†	11760.5		0.496 mg/L	0.0017	0.496 mg/L	0.0017	0.34%
	QC value within limits for Cd Recovery = 99.21%						
Co†	5563.2		0.242 mg/L	0.0005	0.242 mg/L	0.0005	0.19%
	QC value within limits for Co Recovery = 96.99%						
Cr†	17916.9		0.250 mg/L	0.0000	0.250 mg/L	0.0000	0.01%
	QC value within limits for Cr Recovery = 100.07%						
Cu†	94188.2		0.248 mg/L	0.0002	0.248 mg/L	0.0002	0.10%
	QC value within limits for Cu Recovery = 99.36%						
Fe†	252370.8		101 mg/L	0.2	101 mg/L	0.2	0.23%
	QC value within limits for Fe Recovery = 100.53%						
K†	69.2		0.0507 mg/L	0.01678	0.0507 mg/L	0.01678	33.06%
	QC value within limits for K Recovery = Not calculated						
Mg†	1859607.3		245 mg/L	0.5	245 mg/L	0.5	0.22%
	QC value within limits for Mg Recovery = 97.89%						
Mn†	138382.9		0.262 mg/L	0.0003	0.262 mg/L	0.0003	0.11%
	QC value within limits for Mn Recovery = 104.70%						
Mo†	-25.9		-0.00228 mg/L	0.000128	-0.00228 mg/L	0.000128	5.61%
	QC value within limits for Mo Recovery = Not calculated						
Ni†	9674.8		0.472 mg/L	0.0004	0.472 mg/L	0.0004	0.09%
	QC value within limits for Ni Recovery = 94.41%						
Pb†	2040.9		0.463 mg/L	0.0001	0.463 mg/L	0.0001	0.02%
	QC value within limits for Pb Recovery = 92.63%						
V†	38603.5		0.251 mg/L	0.0005	0.251 mg/L	0.0005	0.18%
	QC value within limits for V Recovery = 100.30%						
Zn†	23693.7		0.537 mg/L	0.0012	0.537 mg/L	0.0012	0.23%
	QC value within limits for Zn Recovery = 107.39%						
All analyte(s) passed QC.							

Sequence No.: 117
 Sample ID: Wash
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 0
 Date Collected: 5/9/2007 02:14:12
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: Wash

Analyte Back Pressure Flow
 All 212.0 kPa 0.65 L/min

Mean Data: Wash

Analyte	Mean Corrected Intensity	Conc. Units	Calib Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	387108.8	101 %	%	0.5			0.53%
Yr	318080.1	99.3 %	%	1.44			1.45%
Ba†	1.5	0.00002 mg/L	mg/L	0.000029	0.00002 mg/L	0.000029	131.58%
QC value within limits for Ba		Recovery = Not calculated					
Be†	140.7	0.00005 mg/L	mg/L	0.000015	0.00005 mg/L	0.000015	30.94%
QC value within limits for Be		Recovery = Not calculated					
Ca†	4.9	0.00038 mg/L	mg/L	0.000567	0.00038 mg/L	0.000567	149.27%
QC value within limits for Ca		Recovery = Not calculated					
Cd†	0.6	0.00003 mg/L	mg/L	0.000040	0.00003 mg/L	0.000040	156.12%
QC value within limits for Cd		Recovery = Not calculated					
Co†	-6.5	-0.00028 mg/L	mg/L	0.000066	-0.00028 mg/L	0.000066	23.02%
QC value within limits for Co		Recovery = Not calculated					
Cr†	9.0	0.00013 mg/L	mg/L	0.000091	0.00013 mg/L	0.000091	72.29%
QC value within limits for Cr		Recovery = Not calculated					
Cu†	-349.6	-0.00092 mg/L	mg/L	0.000134	-0.00092 mg/L	0.000134	14.53%
QC value within limits for Cu		Recovery = Not calculated					
Fe†	10.2	0.00407 mg/L	mg/L	0.001808	0.00407 mg/L	0.001808	44.40%
QC value within limits for Fe		Recovery = Not calculated					
K†	-97.8	-0.0717 mg/L	mg/L	0.01563	-0.0717 mg/L	0.01563	21.81%
QC value within limits for K		Recovery = Not calculated					
Mg†	35.5	0.00468 mg/L	mg/L	0.001122	0.00468 mg/L	0.001122	23.99%
QC value within limits for Mg		Recovery = Not calculated					
Mn†	77.3	0.00015 mg/L	mg/L	0.000014	0.00015 mg/L	0.000014	9.54%
QC value within limits for Mn		Recovery = Not calculated					
Mo†	-2.5	-0.00022 mg/L	mg/L	0.000331	-0.00022 mg/L	0.000331	148.88%
QC value within limits for Mo		Recovery = Not calculated					
Ni†	-8.8	-0.00043 mg/L	mg/L	0.000097	-0.00043 mg/L	0.000097	22.58%
QC value within limits for Ni		Recovery = Not calculated					
Pb†	2.4	0.00054 mg/L	mg/L	0.001043	0.00054 mg/L	0.001043	193.80%
QC value within limits for Pb		Recovery = Not calculated					
V†	-1.0	-0.00001 mg/L	mg/L	0.000248	-0.00001 mg/L	0.000248	>999.9%
QC value within limits for V		Recovery = Not calculated					
Zn†	-7.3	-0.00016 mg/L	mg/L	0.000069	-0.00016 mg/L	0.000069	42.07%
QC value within limits for Zn		Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 118
Sample ID: QC-25 lppm
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 5/9/2007 02:17:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: QC-25 lppm
Analyte Back Pressure Flow
All 213.0 kPa 0.65 L/min

Mean Data: QC-25 lppm

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

Sequence No.: 119
Sample ID: QC-25 lppm
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 5/9/2007 02:19:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: QC-25 lppm
Analyte Back Pressure Flow
All 212.0 kPa 0.65 L/min

Mean Data: QC-25 lppm

Table with 8 columns: Analyte, Mean Corrected Intensity, Conc. Units, Calib Units, Std.Dev., Sample Conc. Units, Std.Dev., RSD. Rows include Sca and Yr.

Ba†	68514.0	1.02 mg/L	0.003	1.02 mg/L	0.003	0.34%
	QC value within limits for Ba	Recovery = 102.43%				
Be†	2738959.7	0.962 mg/L	0.0007	0.962 mg/L	0.0007	0.07%
	QC value within limits for Be	Recovery = 96.17%				
Ca†	12941.5	1.01 mg/L	0.015	1.01 mg/L	0.015	1.49%
	QC value within limits for Ca	Recovery = 101.10%				
Cd†	22835.0	0.965 mg/L	0.0032	0.965 mg/L	0.0032	0.33%
	QC value within limits for Cd	Recovery = 96.54%				
Co†	23487.3	1.02 mg/L	0.004	1.02 mg/L	0.004	0.42%
	QC value within limits for Co	Recovery = 102.37%				
Cr†	71956.0	1.00 mg/L	0.003	1.00 mg/L	0.003	0.33%
	QC value within limits for Cr	Recovery = 100.48%				
Cu†	362392.2	0.955 mg/L	0.0004	0.955 mg/L	0.0004	0.04%
	QC value within limits for Cu	Recovery = 95.54%				
Fe†	2553.9	1.02 mg/L	0.011	1.02 mg/L	0.011	1.13%
	QC value within limits for Fe	Recovery = 101.78%				
K†	13222.6	9.70 mg/L	0.076	9.70 mg/L	0.076	0.79%
	QC value within limits for K	Recovery = 96.96%				
Mg†	8229.0	1.08 mg/L	0.014	1.08 mg/L	0.014	1.29%
	QC value within limits for Mg	Recovery = 108.36%				
Mn†	544687.1	1.03 mg/L	0.000	1.03 mg/L	0.000	0.04%
	QC value within limits for Mn	Recovery = 103.03%				
Mo†	10813.7	0.955 mg/L	0.0006	0.955 mg/L	0.0006	0.06%
	QC value within limits for Mo	Recovery = 95.47%				
Ni†	21195.6	1.03 mg/L	0.000	1.03 mg/L	0.000	0.03%
	QC value within limits for Ni	Recovery = 103.41%				
Pb†	4574.6	1.04 mg/L	0.001	1.04 mg/L	0.001	0.12%
	QC value within limits for Pb	Recovery = 103.81%				
V†	152765.9	0.978 mg/L	0.0026	0.978 mg/L	0.0026	0.27%
	QC value within limits for V	Recovery = 97.81%				
Zn†	44486.4	1.01 mg/L	0.002	1.01 mg/L	0.002	0.16%
	QC value within limits for Zn	Recovery = 100.73%				

All analyte(s) passed QC.

Sequence No.: 120
 Sample ID: ECV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 5/9/2007 02:22:54
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ECV

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: ECV

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	361789.0	94.1 %		1.02			1.08%
Yr	304543.3	95.1 %		2.16			2.27%
Ba†	334771.8	5.01 mg/L		0.053	5.01 mg/L	0.053	1.05%
	QC value within limits for Ba Recovery = 100.10%						
Be†	5763542.1	2.02 mg/L		0.025	2.02 mg/L	0.025	1.24%
	QC value within limits for Be Recovery = 101.20%						
Ca†	650703.3	50.8 mg/L		0.08	50.8 mg/L	0.08	0.15%
	QC value within limits for Ca Recovery = 101.67%						
Cd†	59772.0	2.54 mg/L		0.028	2.54 mg/L	0.028	1.12%
	QC value within limits for Cd Recovery = 101.45%						
Co†	115566.2	5.04 mg/L		0.060	5.04 mg/L	0.060	1.19%
	QC value within limits for Co Recovery = 100.74%						
Cr†	361177.5	5.04 mg/L		0.050	5.04 mg/L	0.050	1.00%
	QC value within limits for Cr Recovery = 100.87%						
Cu†	1864507.8	4.92 mg/L		0.025	4.92 mg/L	0.025	0.52%
	QC value within limits for Cu Recovery = 98.30%						
Fe†	12823.0	5.11 mg/L		0.150	5.11 mg/L	0.150	2.93%
	QC value within limits for Fe Recovery = 102.21%						
K†	67805.5	49.7 mg/L		1.66	49.7 mg/L	1.66	3.33%
	QC value within limits for K Recovery = 99.44%						
Mg†	397935.6	52.3 mg/L		0.03	52.3 mg/L	0.03	0.07%
	QC value within limits for Mg Recovery = 104.69%						
Mn†	2681426.1	5.07 mg/L		0.016	5.07 mg/L	0.016	0.32%
	QC value within limits for Mn Recovery = 101.44%						
Mo†	56243.8	4.97 mg/L		0.056	4.97 mg/L	0.056	1.13%
	QC value within limits for Mo Recovery = 99.31%						
Ni†	104092.9	5.08 mg/L		0.055	5.08 mg/L	0.055	1.07%
	QC value within limits for Ni Recovery = 101.58%						
Pb†	22421.6	5.09 mg/L		0.036	5.09 mg/L	0.036	0.71%
	QC value within limits for Pb Recovery = 101.76%						
V†	783894.1	5.02 mg/L		0.016	5.02 mg/L	0.016	0.31%
	QC value within limits for V Recovery = 100.37%						
Zn†	224175.7	5.08 mg/L		0.057	5.08 mg/L	0.057	1.12%
	QC value within limits for Zn Recovery = 101.53%						

All analyte(s) passed QC.

Sequence No.: 121
 Sample ID: ECB
 Analyst: Walter Hsieh
 Initial Sample Wt:
 Dilution: 1X

Autosampler Location: 0
 Date Collected: 5/9/2007 02:26:12
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: ECB

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: ECB

Analyte	Mean Corrected		Calib		Sample		RSD
	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	
Sca	385765.2	100	%	0.3			0.30%
Yr	313546.8	97.9	%	1.67			1.71%
Ba†	-4.1	-0.00006	mg/L	0.000097	-0.00006	mg/L	0.000097 159.18%
	QC value within limits for Ba Recovery = Not calculated						
Be†	193.9	0.00007	mg/L	0.000024	0.00007	mg/L	0.000024 35.70%
	QC value within limits for Be Recovery = Not calculated						
Ca†	-34.3	-0.00268	mg/L	0.000327	-0.00268	mg/L	0.000327 12.19%
	QC value within limits for Ca Recovery = Not calculated						
Cd†	-1.6	-0.00007	mg/L	0.000063	-0.00007	mg/L	0.000063 94.73%
	QC value within limits for Cd Recovery = Not calculated						
Co†	-1.7	-0.00007	mg/L	0.000090	-0.00007	mg/L	0.000090 119.90%
	QC value within limits for Co Recovery = Not calculated						
Cr†	9.8	0.00014	mg/L	0.000040	0.00014	mg/L	0.000040 29.18%
	QC value within limits for Cr Recovery = Not calculated						
Cu†	-314.4	-0.00083	mg/L	0.000069	-0.00083	mg/L	0.000069 8.37%
	QC value within limits for Cu Recovery = Not calculated						
Fe†	-0.0	-0.00001	mg/L	0.000570	-0.00001	mg/L	0.000570 >999.9%
	QC value within limits for Fe Recovery = Not calculated						
K†	-42.9	-0.0315	mg/L	0.00674	-0.0315	mg/L	0.00674 21.43%
	QC value within limits for K Recovery = Not calculated						
Mg†	0.4	0.00005	mg/L	0.001497	0.00005	mg/L	0.001497 >999.9%
	QC value within limits for Mg Recovery = Not calculated						
Mn†	49.1	0.00009	mg/L	0.000004	0.00009	mg/L	0.000004 4.39%
	QC value within limits for Mn Recovery = Not calculated						
Mo†	15.3	0.00135	mg/L	0.000305	0.00135	mg/L	0.000305 22.49%
	QC value within limits for Mo Recovery = Not calculated						
Ni†	-2.2	-0.00011	mg/L	0.000245	-0.00011	mg/L	0.000245 229.59%
	QC value within limits for Ni Recovery = Not calculated						
Pb†	6.7	0.00152	mg/L	0.001557	0.00152	mg/L	0.001557 102.51%
	QC value within limits for Pb Recovery = Not calculated						
V†	19.9	0.00013	mg/L	0.000059	0.00013	mg/L	0.000059 45.82%
	QC value within limits for V Recovery = Not calculated						
Zn†	0.6	0.00002	mg/L	0.000055	0.00002	mg/L	0.000055 364.53%
	QC value within limits for Zn Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 122
 Sample ID: MRL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 21
 Date Collected: 5/9/2007 02:29:40
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Nebulizer Parameters: MRL

Analyte	Back Pressure	Flow
All	212.0 kPa	0.65 L/min

Mean Data: MRL

Analyte	Mean Corrected Intensity	Conc. Units	Calib	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sca	383661.4	99.8 %		0.67			0.67%
Yr	313751.1	98.0 %		0.00			0.00%
Ba†	1346.6	0.0201 mg/L		0.00018	0.0201 mg/L	0.00018	0.90%
	QC value within limits for Ba	Recovery = 100.61%					
Be†	2994.5	0.00105 mg/L		0.000017	0.00105 mg/L	0.000017	1.59%
	QC value within limits for Be	Recovery = 105.27%					
Ca†	12951.3	1.01 mg/L		0.004	1.01 mg/L	0.004	0.41%
	QC value within limits for Ca	Recovery = 101.18%					
Cd†	151.7	0.00658 mg/L		0.000057	0.00658 mg/L	0.000057	0.87%
	QC value within limits for Cd	Recovery = 131.67%					
Co†	1148.6	0.0501 mg/L		0.00044	0.0501 mg/L	0.00044	0.87%
	QC value within limits for Co	Recovery = 100.12%					
Cr†	729.1	0.0102 mg/L		0.00017	0.0102 mg/L	0.00017	1.64%
	QC value within limits for Cr	Recovery = 101.82%					
Cu†	3395.8	0.00898 mg/L		0.000029	0.00898 mg/L	0.000029	0.32%
	QC value within limits for Cu	Recovery = 89.81%					
Fe†	51.8	0.0206 mg/L		0.00043	0.0206 mg/L	0.00043	2.09%
	QC value within limits for Fe	Recovery = 103.24%					
K†	1263.5	0.927 mg/L		0.0401	0.927 mg/L	0.0401	4.33%
	QC value within limits for K	Recovery = 92.65%					
Mg†	815.4	0.107 mg/L		0.0006	0.107 mg/L	0.0006	0.54%
	QC value within limits for Mg	Recovery = 107.28%					
Mn†	1137.7	0.00215 mg/L		0.000018	0.00215 mg/L	0.000018	0.85%
	QC value within limits for Mn	Recovery = 107.60%					
Mo†	223.4	0.0197 mg/L		0.00013	0.0197 mg/L	0.00013	0.67%
	QC value within limits for Mo	Recovery = 98.61%					
Ni†	415.0	0.0202 mg/L		0.00036	0.0202 mg/L	0.00036	1.77%
	QC value within limits for Ni	Recovery = 101.25%					
Pb†	98.7	0.0224 mg/L		0.00053	0.0224 mg/L	0.00053	2.38%
	QC value within limits for Pb	Recovery = 112.02%					
V†	306.0	0.00200 mg/L		0.000003	0.00200 mg/L	0.000003	0.15%
	QC value within limits for V	Recovery = 100.23%					
Zn†	917.8	0.0208 mg/L		0.00008	0.0208 mg/L	0.00008	0.37%
	QC value within limits for Zn	Recovery = 103.93%					
All analyte(s) passed QC.							

Analytical Sequence

Method: 6010 060831

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 Passed
9	4	CCV	QC Passed
10	0	ICB	QC Passed
11	20	MRL	QC Passed
12	0	WASH	Analyzed
13	22	MRL6010	Analyzed
14	38	MBLANK6010	Analyzed
15	39	LCS	Analyzed
16	40	LCSD	Analyzed
17	41	2705020861	Analyzed
18	42	2705020861MS	Analyzed
19	43	2705020861MSD	Analyzed
20	44	2705030181	Analyzed
21	45	2705030181MS	Analyzed
22	4	CCV	QC Passed
23	0	CCB	QC Passed
24	46	2705030181MSD	Analyzed
25	47	2705020857	Analyzed
26	48	2705020858	Analyzed
27	49	2705020859	Analyzed
28	50	2705020860_5X	Analyzed
29	51	2705020862	Analyzed
30	52	2705020863	Analyzed
31	53	2705020864	Analyzed
32	54	2705030127	Analyzed
33	55	2705030133	Analyzed
34	4	CCV	QC Passed
35	0	CCB	QC Passed
36	5	MCV	QC Passed
37	56	2705030134	Analyzed
38	57	2705030135	Analyzed
39	58	2705030175_5X	Analyzed
40	59	2705030177	Analyzed
41	60	2705030178_5X	Analyzed
42	61	2705030179_10X	Analyzed
43	62	2705030180	Analyzed
44	63	2705030182	Analyzed
45	64	2705030183	Analyzed
46	65	MBLANK6010	Analyzed
47	4	CCV	QC Passed
48	0	CCB	QC Passed
49	66	LCS	Analyzed
50	67	LCSD	Analyzed
51	68	2705020848	Analyzed
52	69	2705020848MS	Analyzed
53	70	2705020848MSD	Analyzed
54	71	2705020851	Analyzed
55	72	2705020851MS	Analyzed
56	73	2705020851MSD	Analyzed
57	74	2705020837_20X	Analyzed
58	75	2705020838_10X	Analyzed
59	4	CCV	QC Passed
60	0	CCB	QC Passed
61	5	MCV	QC Passed
62	76	2705020839_10X	Analyzed
63	77	2705020840_10X	Analyzed
64	78	2705020841_10X	Analyzed
65	79	2705020842_10X2705020843	Analyzed
66	80	2705020843_5X	Analyzed
67	81	2705020844_5X	Analyzed

68	82	2705020845_5X	Analyzed
69	83	2705020846	Analyzed
70	84	2705020847	Analyzed
71	85	2705020849	Analyzed
72	4	CCV	QC Passed
73	0	CCB	QC Passed
74	86	2705020850	Analyzed
75	87	2705020852	Analyzed
76	88	2705020853	Analyzed
77	89	27050209854_5X	Analyzed
78	90	2705020855	Analyzed
79	91	2705020856	Analyzed
80	92	MBLANK6010	Analyzed
81	93	LCS	Analyzed
82	94	LCSD	Analyzed
83	95	2705030184	Analyzed
84	4	CCV	QC Passed
85	0	CCB	QC Passed
86	5	MCV	QC Passed
87	96	2705030184MS	Analyzed
88	97	2705030184MSD	Analyzed
89	98	2705040334	Analyzed
90	99	2705040334MS	Analyzed
91	100	2705040334MSD	Analyzed
92	101	2705030203_5X	Analyzed
93	102	2705030204	Analyzed
94	103	2705030205	Analyzed
95	104	2705030206	Analyzed
96	105	2705030207	Analyzed
97	4	CCV	QC Passed
98	0	CCB	QC Passed
99	106	2705030208	Analyzed
100	107	2705030211	Analyzed
101	108	2705030217	Analyzed
102	109	2705030218	Analyzed
103	110	2705030219	Analyzed
104	111	2705030220	Analyzed
105	112	2705040313	Analyzed
106	113	2705040314	Analyzed
107	114	2705040316	Analyzed
108	115	2705040327	Analyzed
109	4	CCV	QC Passed
110	0	CCB	QC Passed
111	5	MCV	QC Passed
112	116	2705040328	Analyzed
113	117	2705040330	Analyzed
114	118	2705040331	Analyzed
115	10	ICSA	QC Passed
116	11	ICSAB	QC Passed
117	0	Wash	QC Passed
118	12	QC-25 lppm	QC Failed
119	12	QC-25 lppm	QC Passed
120	4	ECV	QC Passed
121	0	ECB	QC Passed
122	21	MRL	QC Passed

**Standard
Preparation
Worksheet
&
Certificate of
Analysis**

Reagent Lot #
 HNO3 R# 100401 HCL R# 100402
 IS = Yttrium(ME0509007)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/MCV/ECV	ME0610005	(04/10/08)	CCV/ECV 1:20 ME0610006
(Prepare daily)			MCV 1:40 ME0610007
Spike/LCS	ME0606004	(12/13/07)	1:100 ME0601006
(Prepare daily)	ME0703002	(05/10/07)	1:100
	ME0606003	(12/13/07)	1:200
MRL	ME0703010	(09/16/07)	1:100 ME0603015
(Prepare daily)			
ICSA	ME0703003	(09/16/07)	
ICSAB	ME0703004	(09/16/07)	
QC-25 1PPM	ME0703005	(09/16/07)	
Linearity	ME0701011	(07/26/07)	
Method Sr/Ti/Sn/SiO2			
Calibration	ME0701012	(05/10/07)	
CCV/ECV	ME0703007	(09/16/07)	
Spike/LCS	ME0703006	(09/16/07)	1:100
(Prepare daily)			
MRL	ME0703009	(05/10/07)	1:100
(Prepare daily)			
Method Li			
Std/ICV/MRL	ME0703008	(09/16/07)	1:1000, 200, 40, 10
(Prepare daily)			
LCS/Spike	ME0701003	(07/04/07)	1:50
(Prepare daily)			
ccv	ME0701003	(07/04/07)	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.

Initial:

Date:

lv 37
4/23/07

METALS STANDARD DOCUMENTATION

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

ME #: 0704023
By: wbh
Lot #: A2-MEB235010
Certificate: Y
NIST SRM: Varies
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		1000 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		100 ug/ml
Be		50 ug/ml
SR		40 ug/ml
Ag		30 ug/ml
		20 ug/ml

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

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

M80704023

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, Cr ₃	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:

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

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

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

$\sum s_i$ = The summation of all significant estimated errors
 (Most common are the errors from instrumental measurement, weighing, dilution to volume, and the fixed error reported on the NIST SRM certificate of analysis.)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

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

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#	ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212	Ag	Volhard	999a	999a
Al	ICP Assay	3101a	010808	Al	EDTA	928	928
As	ICP Assay	3103a	010713	As	Gravimetric		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2	Ba	ICP Assay	3104a	992907
Be	Gravimetric		See Sec. 4.2	Be	ICP Assay	3105a	892707
Ca	EDTA	928	928	Ca	ICP Assay	3109a	000622
Cd	EDTA	928	928	Cd	ICP Assay	3108	890312
Co	ICP Assay	3113	00630	Co	EDTA	928	928
Cr3	ICP Assay	3112a	990607	Cr3	Gravimetric		See Sec. 4.2
Cu	EDTA	928	928	Cu	ICP Assay	3114	891811
Fe	ICP Assay	3126a	000606	Fe	EDTA	928	928
K	ICP Assay	3141a	891312	K	Gravimetric		See Sec. 4.2
Mg	EDTA	928	928	Mg	ICP Assay	3131a	991107
Mn	EDTA	928	928	Mn	ICP Assay	3132	890903
Na	ICP Assay	3152a	990907	Na	Gravimetric		See Sec. 4.2
Ni	EDTA	928	928	Ni	ICP Assay	3136	000612
Pb	ICP Assay	3128	030721	Pb	EDTA	928	928
Se	ICP Assay	3149	992106	Se	Gravimetric		See Sec. 4.2
Sr	ICP Assay	3153a	990906	Sr	EDTA	928	928
Tl	Gravimetric		See Sec. 4.2	Tl	ICP Assay	3158	993012
V	ICP Assay	3165	992706	V	EDTA	928	928
Zn	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. 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.

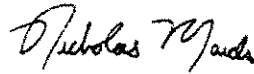
Certification Date: April 16, 2007

Expiration Date:

EXPIRES
12/2008

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

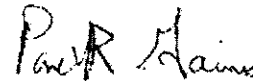
Certificate Prepared By: Nick Maida, Product Documentation Administrator



Certificate Approved By: Katalin Le, QC Manager



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



ME0704024

Initial:

Date:

WJ
4/23/07

METALS STANDARD DOCUMENTATION

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

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

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

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
 Catalog No.: MWH-ICAP-CAL-2
 Lot Number: **A2-MEB235011**
 Matrix: tr. HF, 5% HNO₃(abs)

M70704024

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:

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

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

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

$\sum s_i$ = The summation of all significant estimated errors
 (Most common are the errors from instrumental measurement, weighing, dilution to volume, and the fixed error reported on the NIST SRM certificate of analysis.)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

- "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
- This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

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

122008

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#	ELEMENT	METHOD	NIST SRM#	SRM LOT#
B	ICP Assay	3107	991907	B	Gravimetric		See Sec. 4.2
Mo	Gravimetric		See Sec. 4.2	Mo	ICP Assay	3134	891307
Sb	ICP Assay	3102a	990707	Sb	Gravimetric		See Sec. 4.2
Sn	ICP Assay	3161a	993107	Sn	Gravimetric		See Sec. 4.2
Ti	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 $20 \pm 4^\circ\text{C}$. 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.

Initial:
Date:

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		100 ppm
Ba		50 ppm
bE		100 ppm
Ca		40 ppm
Cd		1000 ppm
Co		50 ppm
Cr		100 ppm
Cu		100 ppm
Fe		100 ppm
K		100 ppm
Mg		1000 ppm
Mn		1000 ppm
Mo		100 ppm
Na		100 ppm
Ni		100 ppm
Pb		1000 ppm
Sb		100 ppm
Se		100 ppm
Tl		100 ppm
V		100 ppm
Zn		100 ppm
Sr		100 ppm
Sn		20 ppm
Ti		20 ppm
		20 ppm



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 1000 CS Amsterdam Fax +31 20 420 28 36
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*Innovative Solutions
 in Analytical Science and
 Technology*

Expiry: 4/10/2008

Certificate of Analysis

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

M70610005

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

wbh
6/19/06

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

ME #: 0606004
By: wbh
Lot #: 06F103
Certificate: Y
NIST SRM: 3100 Series
Storage: Room Temp

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

M7060604

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.

Initial: WSY
Date: 3/5/07

METALS STANDARD DOCUMENTATION

Standard: ICP Spike solution
Date Received/Prepped: 3/5/2007
Date Expired: 5/10/2007
Manufacturer: MWH-WBH
Matrix: 2% HNO3
Amount: 100mL x 2

ME #: 0703002
By: WBH
Lot #:
Certificate: Y
NIST SRM: 3100 SERIES
Storage: Room Temp

Component	Comment	Conc. Unit:
AS	8.0mL ME0611005/100mL	80 ppm
PB	8.0mL ME0511020/100mL	80 ppm
SE	8.0mL ME0703001/100mL	80 ppm
TL	8.0mL ME0509006/100mL	80 ppm

Initial:

Date:

WSP
11/1/06

METALS STANDARD DOCUMENTATION

Standard: Arsenic Stock Std
Date Received/Prepped: 11/1/2006
Date Expired: 10/1/2007
Manufacturer: IV
Matrix: 1.4% HNO₃
Amount: 100mL

ME #: 0611005
By: WBH
Lot #: Y-AS02029
Certificate: Y
NIST SRM:
Storage: Room Temp

<u>Component</u>	<u>Comment</u>	<u>Conc. Unit:</u>
AS	Cat # CGAS1-1	1004 ppm

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

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

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

MT0611005

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:

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_1}{n}$$

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

$$\text{Uncertainty } (\pm) = \frac{2\{(\sum s_1)^2\}^{1/2}}{(n)^{1/2}}$$

∑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

- 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.

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

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at $20 \pm 4^\circ\text{C}$. 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; H_3AsO_4 and HAsO_2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl , HNO_3 , H_3PO_4 , H_2SO_4 and HF aqueous matrices water and NH_4OH . 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% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

As Containing Samples (Preparation and Solution) - As_2O_3 (soluble in 1:1 H_2O / HNO_3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphous form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (One gram of powdered sample is fused in a NiO crucible with 10 grams of a 1:1 mix of K_2CO_3 and KNO_3 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 Na_2CO_3 / Na_2O_2 mix in a NiO crucible. The fuseate is extracted with water and acidified with HNO_3)

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 $\mu\text{g}/\text{mL}$	1	atom	Cr
ICP-OES193.696 nm	0.1 / 0.01 $\mu\text{g}/\text{mL}$	1	atom	V, Ge
ICP-OES 228.812 nm	0.1 / 0.01 $\mu\text{g}/\text{mL}$	1	atom	<u>Cd</u> , <u>Pt</u> , 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)**

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.

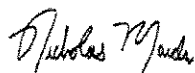
11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Inorganic Ventures Labs concurs with state and federal regulatory agencies'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

Certification Date: September 15, 2005

Expiration Date: **EXPIRES**
1st 2007

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

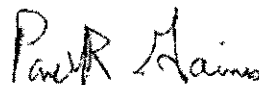
Certificate Prepared By: Nick Maida, QA Administrator



Certificate Approved By: Katalin Le, QC Manager



Certifying Officer: Paul Gaines, PhD., Technical Director





Initial:
Date:

WBY
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



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CERTIFICATE OF ANALYSIS

P/N 4400-1000491
P/N S4400-1000491
 Single-Element Selenium Standard
 Se in 2% HNO₃
 1000 ± 3 µg/mL

M7-0703001

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.

	<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>		<u>ppb</u>	<u>DL</u>
Al	1.8	0.1	Cu	0.4	0.1	Pb	0.3	0.1	K	ND	70
Sb	ND	0.1	Dy	ND	0.1	Li	ND	0.4	Pr	ND	0.1
As	ND	6	Er	ND	0.1	Lu	ND	1	Re	ND	0.1
Ba	ND	0.1	Eu	ND	0.1	Mg	1.1	0.2	Rh	ND	0.1
Be	ND	0.1	Gd	ND	0.1	Mn	ND	1	Rb	ND	0.1
Bi	ND	0.1	Ga	ND	0.1	Hg	ND	0.2	Ru	ND	0.1
B	ND	4	Ge	ND	0.1	Mo	0.6	0.1	Sm	ND	0.1
Br	INT	10	Au	ND	0.1	Nd	ND	0.1	Se	X	6
Cd	0.4	0.1	Hf	ND	0.1	Ni	0.6	0.1	Si	40	8
Ca	5	7	Ho	ND	0.1	Nb	INT	0.1	Ag	0.8	0.1
Ce	ND	0.1	I	0.5	0.2	Os	ND	0.1	Na	3.8	1
Cs	ND	0.1	Ir	ND	0.1	Pd	ND	0.1	Sr	ND	0.1
Cr	ND	1	Fe	ND	30	P	ND	10	Ta	ND	0.1
Co	ND	0.1	La	ND	0.1	Pt	ND	0.1	Te	ND	0.1

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

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

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

Initial:

WBH

Date:

6/19/06

METALS STANDARD DOCUMENTATION

Standard: ICP LCS/Spike stock Std
Date Received/Prepped: 6/19/2006
Date Expired: 12/13/2007
Manufacturer: MWH-WBH
Matrix: 5% HNO3
Amount: 500 mL

ME #: 0605003
By: WBH
Lot #: 06F102
Certificate: Y
NIST SRM: Various
Storage: Room Temp

<u>Component</u>	<u>Comment</u>	<u>Conc. Unit:</u>
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: 06F102
Shelf Life: 18 months
Expiration Date: 12/13/2007

M70606003

MWH
Dat MW Standard
 $\mu\text{g/mL} \pm 0.5\%$ 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 1000 $\mu\text{g/mL}$ by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against the National Institute of Standards and Technology's SRM 3100 series, NIST approved second source and/or gravimetrically.

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

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

Initial: WBH
Date: 3/16/07

METALS STANDARD DOCUMENTATION

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

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

Initial: WPH
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 #: 061162
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		20 ppm
Mn		100 ppm
Mo		2 ppm
Ni		20 ppm
K		20 ppm
Se		1000 ppm
Ag		100 ppm
Na		10 ppm
Zn		1000 ppm
V		20 ppm
Tl		2 ppm
Tl		10 ppm
Li		1 ppm
Ti		20 ppm
Sr		10 ppm
Sn		200 ppm



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Expiry: 9/20/2007

MZ0609001

Certificate of Analysis

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

MWH
 Custom Standard
 2% HNO₃ + tr HF

Concentrations in ug/mL ± 0.5%

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

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

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

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

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129

Initial: DYH
Date: 3/16/07

METALS STANDARD DOCUMENTATION

Standard: Interference Check Std A(ICSA) ME #: 0703003
Date Received/Prepped: 3/16/2007 By: DYH
Date Expired: 9/16/2007 Lot #: VARIOUS
Manufacturer: MWH-DYH 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

Initial: WBH
Date: 2/2/06

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% HNO₃

M80603001

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.

Initial:

DYH

Date:

3/16/07

METALS STANDARD DOCUMENTATION

Standard: Interference Check Std AB(ICSAB)
Date Received/Prepped: 3/16/2007
Date Expired: 9/16/2007
Manufacturer: MWH-DYH
Matrix: 5% HNO3 + 10% HCl
Amount: 500 mL

ME #: 0703004
By: DYH
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	2.5mL ME0603002/500mL	0.5 ppm
Ba		0.25 ppm
Be		0.25 ppm
Cd		0.5 ppm
Co		0.25 ppm
Cr		0.25 ppm
Cu		0.25 ppm
Mn		0.25 ppm
Ni		0.5 ppm
Pb		0.5 ppm
V		0.25 ppm
Zn		0.5 ppm

Initial: 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% HNO₃

Lot # 06A078

M80603001

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

Elements and Concentrations: µg/mL

Al 5000 Ca 5000 Fe 2000 Mg 5000

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

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

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

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

Initial:

Date:

WBH
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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MF0603002

CERTIFICATE OF ANALYSIS

P/N 4400-INTB1-100

CLP Analytes B Solution
in 5% HNO₃

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-megohm deionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

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

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

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

Initial: DYH
 Date: 3/16/07

METALS STANDARD DOCUMENTATION

Standard:	ICP QC-25 1PPM	ME #: 0703005
Date Received/Prepped:	3/16/2007	By: DYH
Date Expired:	9/16/2007	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

Initial:
Date:

WBH
8/31/06

METALS STANDARD DOCUMENTATION

Standard: QC Check Std 21
Date Received/Prepped: 8/31/2006
Date Expired: 8/31/2007
Manufacturer: Crescent Chemical
Matrix: 5% HNO₃ + tr. Tartaric Acid
Amount: 100 mL

ME #: 0608006
By: WBH
Lot #: 062504J
Certificate: Y
NIST SRM: Various
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% HNO₃/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

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

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

Initial: WBN
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% HNO ₃ + 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

ME0608007

Laboratory Report - Certificate of Analysis

Environmental Multielement Standard

QC Check Standard 7

CATALOG NO: QC-007.1

CONTENTS: See Below

MATRIX: 5% HNO₃/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.

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(516) 348-0333 - Fax (516) 348-0913*

ME0701011

Initial:

Date:

WBH
1/26/07

METALS STANDARD DOCUMENTATION

Standard: ICP LINEARITY CHECK
Date Received/Prepped: 1/26/2007
Date Expired: 7/26/2007
Manufacturer: MWH-WBH
Matrix: 5% HNO3
Amount: 500mL

ME #: 0701011
By: WBH
Lot #:
Certificate: Y
NIST SRM: 3100 SERIES
Storage: Room Temp

Component	Comment	Conc. Unit:
CA	15.0mL ME0509005/500mL	300 ppm
K	15.0mL ME0509001/500mL	300 ppm
MG	10.0mL ME0509002/500mL	200 ppm
NA	15.0mL ME0509004/500mL	300 ppm
FE	5.0mL ME0701008/500mL	100 ppm

Initial:
Date:

WBH
1/26/07

METALS STANDARD DOCUMENTATION

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

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

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



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Innovative Solutions
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CERTIFICATE OF ANALYSIS

P/N 4400-10M261
 P/N S4400-10M261
 Single-Element Iron Standard
 Fe in 4% HNO₃
 10,000 ± 30 µg/mL

ME070100X

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.

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

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LOG#	CLIENT	SX ID	MIX	VOLUME	COMMENTS	
BLANK LCS LCSO	2007 DIGEST	JRF	05-08-07		H403 R# 100410 (1ml) H41 R# 100402 (2.5ml) LCS / SPIKE ME 0606004 ME 0703002 → (2.5ml) ME 0704005 → (0.250ml)	
2705020861 ↓ MS ↓ MSD	KEREMCQEB-MP	EB-1 ↓ M-19 ↓ M-98 M-99 M-57A M-25 M-10 M-4 M-37 M-5A M-6A M-7B H-28A M-31A M-77 M-52 M-50 M-21 M-39 EB-2	AQ	50ml → 50ml		
2705030181 ↓ MS ↓ MSD						
2705020857 0858 0859 0860 0862 0863 ↓ 0804						
2705030127 0133 0134 0135 0175 0177 0178 0179 0180 0182 0183						
		200-7 DIGEST	JRF	05-08-07		

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Witnessed & Understood by me,

Date

Invented by

Date

146

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LOG #	CLIENT	SX-ID	MIX	VOLUME	COMMENTS
	200-7 DIGEST	JRF	05-08-07		HNO ₃ R# 100410 (1ml) HCl R# 100402 (25 LCS/SPIKE ME 0606004 ME 0703002 → (0.5ml) ME 0704005 → (0.25ml) MRL ME 0703010 → (500ul)
2705020848	KERRMCGEE-MP	I-S	AQ	50ml → 50ml	
↓ MS	↓	↓			
↓ MSD					
2705020851	KERRMCGEE-MP	I-B			
↓ MS		↓			
↓ MSD					
2705020837		I-O			
0838		I-P			
0839		I-H			
0840		I-U			
0841		I-Q			
0842		I-F			
0843		I-N			
0844		I-E			
0845		I-M			
0846		I-D			
0847		I-C			
0849		I-L			
0850		I-R			
0852		I-AR			
0853		PL-127			
0854		I-T			
0855		M-69			
↓ 0856	↓	M-79			
	200-7 DIGEST	05/08/07	JRF		

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