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Level IV Data Package

MWH Group 192802

Method: 200.7

Sample No.:
2701090304
2701090303

EPA 200.7/6010B QC Check List

Analyst WSh Analysis Date 1/10/07 Reviewer/Date _____

Instrumnet PerKin Elmer Optima 4300DV

✓ All sample analyzed within 6 month holding time

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

Initial and closing QC
✓ ICV within +/- 5%
✓ Linearity check +/- 10%
✓ ICSAB +/- 20%
✓ 1 PPM check +/-/10%
✓ MRL +/- 50%

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

General QC
✓ RPD between MS/MSD is within +/-/20%
Int ✓ RPD between LCS/LCSD is within +/- 20%
✓ Internal standards +/-20%
✓ All pH of the samples are < 2

✓ No more than 20 samples per batch

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

N/A QIR needed for failed QC

✓ Special Det Code noted on the cover sheet Follows, FC Dis

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

Gen ✓ Proper MRL check ran for special low MRL samples Follows

Int

Reagent and Standards used for
Optima 4300 DV
Updated 01/05/07

Int: WSh
Date: 1/10/07

Method 200.7/6010

ICP SUMMARY SHEET

File ID: 070110
Date Started: 1/10/07
Analyst ID: WBH

SAMPLE ID

Wash	(9:02)	FilterCheck	(9:28)	2701090271	(9:50)
X701030383	(10:01)	X701020333	(10:18)	2701090265	(10:23)
2701090267	(10:26)	2701090264	(10:30)	2701090258	(10:34)
2701090270	(10:38)	2701090272	(10:41)	2701090269	(10:45)
2701090526	(10:49)	2701090528	(11:12)	2701090268	(11:16)
2701090260	(11:19)	2701090262	(11:23)	2701090263	(11:27)
2701090525	(11:30)	2701090261	(11:35)	2701090435	(11:39)
2701090433	(11:43)	2701090548	(12:06)	2701090554	(12:18)
2701090553	(12:22)	2701090571	(12:27)	2701090550	(12:31)
2701090551	(12:47)	2701090555	(12:51)	2701090552	(12:56)
2701090559	(13:00)	2701090579	(13:05)	2701090266	(13:09)
2701090527	(13:20)	2701090587	(13:24)	2701090598	(13:36)
2701090558	(13:40)	2701090529	(13:44)	2701090304_2	(13:48)
2701090303_2	(13:53)	2701090163_2	(13:57)	2701090170_2	(14:01)
WASH	(14:09)	2701090312	(14:38)	X701090313	(14:50)
D701090312	(14:54)	D701090313	(14:59)	2701020011	(15:27)
2701050179	(15:39)	2701040317	(15:44)	2701050074_2	(15:48)
2701050058_2	(15:52)	WASH	(15:59)	Wash	(16:11)

COMMENT: Fe low, Fe DIS

Analyst: WBH

Approved By: _____

BATCH NUMBER for 070110

Analyst
1/10/07

Test Parameter:

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

Batch ID: 2701090271

2701090271	2701090265	2701090267
2701090264	2701090258	2701090270
2701090272	2701090269	2701090526
2701090528	2701090268	2701090260
2701090262	2701090263	2701090525
2701090261	2701090435	2701090433

Batch ID: 2701090548

2701090548	2701090554	2701090553
2701090571	2701090550	2701090551
2701090555	2701090552	2701090559
2701090579	2701090266	2701090527
2701090587	2701090598	2701090558
2701090529	2701090304_2X •	2701090303_2X •
2701090163_2X	2701090170_2X	

Batch ID: 2701090312

2701090312

Batch ID: 2701020011

2701020011	2701050179	2701040317
2701050074_2X	2701050058_2X	

File ID: 070110 CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
ICV	1/10/07	8:47	1	9.9933	9.99	95-105	99.9%
Linearity Check	1/10/07	8:51	1	-0.0014	ND		
ICSA	1/10/07	8:54	1	-0.0016	ND	80-120	
ICSAB	1/10/07	8:58	1	.24258	.243	80-120	97.0%
Wash	1/10/07	9:02	1	-0.0001	ND		
QC-25 1ppm	1/10/07	9:08	1	1.0230	1.0		No Sx.
CCV	1/10/07	9:14	1	0.0008	0.0008	90-110	~~1.67% Q~~
ICB	1/10/07	9:18	1	-0.0002	ND		
MRL	1/10/07	9:24	1	0.0104	.0104	50-150	103%
FilterCheck	1/10/07	9:28	1	-0.0001	ND		
MRL/2	1/10/07	9:31	1	0.0051	.0051		
MRL2007	1/10/07	9:35	1	0.0091	.0091		
MBLANK	1/10/07	9:39	1	-0.0003	ND		
LCS	1/10/07	9:42	1	.99606	.996	85-115	99.6%
LCSD	1/10/07	9:46	1	.99895	.999	85-115	99.8%
2701090271	1/10/07	9:50	1	-0.0014	ND		
2701090271MS	1/10/07	9:53	1	1.0250	1.03	[1.025]	102%
2701090271MSD	1/10/07	9:57	1	1.0265	1.03	[1.027]	102%
2701090271T	1/10/07	9:57	1		1.00	70 - 130	
X701030383	1/10/07	10:01	1	-0.0014	ND		
CCV	1/10/07	10:11	1	4.9899	4.99	90-110	99.7%
CCB	1/10/07	10:15	1	-0.0004	ND		
X701020333	1/10/07	10:18	1	-0.0015	ND		
2701090265	1/10/07	10:23	1	-0.0012	ND		
2701090267	1/10/07	10:26	1	-0.0013	ND		
2701090264	1/10/07	10:30	1	-0.0012	ND		
2701090258	1/10/07	10:34	1	-0.0012	ND		
2701090270	1/10/07	10:38	1	-0.0011	ND		
2701090272	1/10/07	10:41	1	-0.0011	ND		
2701090269	1/10/07	10:45	1	-0.0012	ND		
2701090526	1/10/07	10:49	1	-0.0015	ND		
2701090526MS	1/10/07	10:53	1	1.0102	1.01	[1.010]	101%
CCV	1/10/07	10:57	1	5.0058	5.01	90-110	100%
CCB	1/10/07	11:01	1	-0.0003	ND		
MCV	1/10/07	11:04	1	2.5236	2.52	90-110	100%
2701090526MSD	1/10/07	11:08	1	1.0265	1.03	[1.027]	102%
2701090526T	1/10/07	11:08	1		1.00	70 - 130	
2701090528	1/10/07	11:12	1	0.0042	.0042		
2701090268	1/10/07	11:16	1	-0.0011	ND		
2701090260	1/10/07	11:19	1	-0.0012	ND		
2701090262	1/10/07	11:23	1	-0.0011	ND		
2701090263	1/10/07	11:27	1	-0.0012	ND		
2701090525	1/10/07	11:30	1	-0.0001	ND		
2701090261	1/10/07	11:35	1	-0.0011	ND		
2701090435	1/10/07	11:39	1	-0.0017	ND		
2701090433	1/10/07	11:43	1	-0.0015	ND		

File ID: 070110

CR

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
CCV	1/10/07	11:47	1	4.9954	5.00	90-110	99.9%
CCB	1/10/07	11:51	1	-0.0004	ND		
MBLANK	1/10/07	11:55	1	-0.0004	ND		
LCS	1/10/07	11:59	1	1.0152	1.02	85-115	101%
LCSD	1/10/07	12:02	1	1.0172	1.02	85-115	101%
2701090548	1/10/07	12:06	1	-0.0005	ND		
2701090548MS	1/10/07	12:11	1	1.0240	1.02	[1.024]	102%
2701090548MSD	1/10/07	12:14	1	1.0162	1.02	[1.016]	101%
2701090548T	1/10/07	12:14	1		1.00	70 - 130	
2701090554	1/10/07	12:18	1	-0.0001	ND		
2701090553	1/10/07	12:22	1	-0.0001	ND		
2701090571	1/10/07	12:27	1	0.0022	.0022		
2701090550	1/10/07	12:31	1	-0.0005	ND		
CCV	1/10/07	12:36	1	5.0144	5.01	90-110	100%
CCB	1/10/07	12:40	1	-0.0002	ND		
MCV	1/10/07	12:43	1	2.4891	2.49	90-110	99.5%
2701090551	1/10/07	12:47	1	-0.0012	ND		
2701090555	1/10/07	12:51	1	0.0001	0.0001		
2701090552	1/10/07	12:56	1	-0.0008	ND		
2701090559	1/10/07	13:00	1	0.0024	.0024		
2701090579	1/10/07	13:05	1	0.0023	.0023		
2701090266	1/10/07	13:09	1	-0.0012	ND		
2701090266MS	1/10/07	13:13	1	1.0285	1.03	[1.029]	102%
2701090266MSD	1/10/07	13:16	1	1.0202	1.02	[1.020]	102%
2701090266T	1/10/07	13:16	1		1.00	70 - 130	
2701090527	1/10/07	13:20	1	-0.0013	ND		
2701090587	1/10/07	13:24	1	-0.0011	ND		
CCV	1/10/07	13:29	1	5.0973	5.1	90-110	101%
CCB	1/10/07	13:33	1	-0.0003	ND		
2701090598	1/10/07	13:36	1	-0.0010	ND		
2701090558	1/10/07	13:40	1	-0.0010	ND		
2701090529	1/10/07	13:44	1	.01004	.010		
2701090304_2X ✓	1/10/07	13:48	2	0.0320	.032		
2701090303_2X ✓	1/10/07	13:53	2	0.0010	0.0009		
2701090163_2X	1/10/07	13:57	2	0.0330	.033		
2701090170_2X	1/10/07	14:01	2	0.0011	.0011		
WASH	1/10/07	14:09	1	0.0003	0.0003		
MBLANK	1/10/07	14:13	1	0.0002	0.0001		
CCV	1/10/07	14:17	1	5.0520	5.05	90-110	101%
CCB	1/10/07	14:23	1	-0.0001	ND		
MCV	1/10/07	14:27	1	2.5226	2.52	90-110	100%
LCS	1/10/07	14:30	1	1.0231	1.02	85-115	102%
LCSD	1/10/07	14:34	1	1.0230	1.02	85-115	102%
2701090312	1/10/07	14:38	1	-0.0017	ND		
2701090312MS	1/10/07	14:42	1	1.0452	1.05	[1.045]	104%
2701090312MSD	1/10/07	14:46	1	1.038	1.04	[1.038]	103%
2701090312T	1/10/07	14:46	1		1.00	70 - 130	
X701090313	1/10/07	14:50	1	-0.0014	ND		
D701090312	1/10/07	14:54	1	-0.0016	ND		

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Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
D701090313	1/10/07	14:59	1	-0.0016	ND		
MBLANK	1/10/07	15:03	1	-0.0004	ND		
LCS	1/10/07	15:07	1	1.0347	1.03	85-115	103%
CCV	1/10/07	15:11	1	5.1378	5.14	90-110	102%
CCB	1/10/07	15:20	1	-0.0002	ND		
LCSD	1/10/07	15:23	1	.97311	.973	85-115	97.3%
2701020011	1/10/07	15:27	1	0.0002	0.0001		
2701020011MS	1/10/07	15:32	1	.98727	.987	[0.987]	98.7%
2701020011MSD	1/10/07	15:35	1	.98096	.981	[0.981]	98.0%
2701020011T	1/10/07	15:35	1		1.00	70 - 130	
2701050179	1/10/07	15:39	1	-0.0010	ND		
2701040317	1/10/07	15:44	1	0.0005	0.0005		
2701050074_2X	1/10/07	15:48	2	.11156	.110		
2701050058_2X	1/10/07	15:52	2	1.1712	1.2		
WASH	1/10/07	15:59	1	0.0006	0.0006		
ICSA	1/10/07	16:03	1	-0.0017	ND	80-120	
ICSAB	1/10/07	16:07	1	.25000	.25	80-120	100%
Wash	1/10/07	16:11	1	0.0005	0.0005		
QC-25 1ppm	1/10/07	16:16	1	1.0412	1.0		
ECV	1/10/07	16:20	1	5.0867	5.09	90-110	101%
ECB	1/10/07	16:29	1	0.0002	0.0002		
MRL	1/10/07	16:35	1	0.0109	.0109	50-150	109%
CCB	1/10/07	16:51	1	0.0000	0.0000		
MRL	1/10/07	16:55	1	0.0105	.0105	50-150	105%

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Sample ID	Time	CR	CU	FE	K	MG	MN	MO	NA	NI	PB	SB
ICV	8:47	9.99/10	10.0/10	9.99/10	99.5/100	102/100	10.0/10	10.0/10	99.5/100	10.0/10	9.95/10	9.74/10
Linearity Check	8:51	-.0014	-.0015	95.78	303.3	188.9	0.0100	0.0102	295.3	-.0009	-.0041	0.0178
ICSA	8:54	-.002	-.001	95.5/100	0.296	236/250	0.002	0.002	0.060	-.001	-.040	0.010
ICSAB	8:58	0.243/.25	0.247/.25	94.4/100	0.086	237/250	0.251/.25	0.001	-.018	0.458/.5	0.443/.5	0.008
Wash	9:02	-.0001	0.0005	0.0009	0.0244	0.0008	0.0000	0.0008	-.0250	0.0001	0.0019	-.0008
QC-25 1ppm	9:08	1.023	1.020	0.9983	9.724	1.075	1.064	0.9926	1.008	1.086	1.087	0.9710
CCV	9:14	0.001(5)	0.004(5)	-.016	0.503(50)	0.014(50)	-.000	0.002(5)	N/A	-.003	0.003(5)	0.016(5)
ICB	9:18	-.0002	0.0002	-.0008	0.0167	0.0001	-.0001	0.0017	-.0169	0.0001	0.0011	-.0008
MRL	9:24	0.010/.01	0.011/.01	0.021/.02	0.994/1	0.109/.1	0.002/.002	0.021/.02	1.01/1	0.022/.02	0.023/.02	0.045/.05
FilterCheck	9:28	-.0001	0.0004	-.0010	-.0000	0.0006	-.0001	0.0006	-.0232	0.0002	-.0004	0.0005
MRL/2	9:31	0.005/.01	0.006/.01	0.010/.02	0.551/1	0.055/.1	0.001/.002	0.010/.02	0.510/1	0.011/.02	0.011/.02	0.023(.05)
MRL2007	9:35	0.009/.01	0.011/.01	0.023/.02	0.964/1	0.104/.1	0.002/.002	0.020/.02	1.00/1	0.021/.02	0.020/.02	0.046/.05
MBLANK	9:39	-.0003	0.0001	-.0001	0.0240	-.0000	-.0001	0.0003	-.0147	0.0002	-.0001	-.0015
LCS	9:42	0.996/1	1.02/1	4.93/5	19.9/20	20.8/20	0.518/.5	0.996/1	50.1/50	0.517/.5	1.03/1	0.449/.5
LCSD	9:46	0.999/1	1.02/1	4.95/5	19.9/20	20.8/20	0.520/.5	0.998/1	50.3/50	0.518/.5	1.02/1	0.449/.5
2701090271	9:50	-.0014	0.0022	0.0489	0.3950	0.6191	0.0040	0.0012	5.174	0.0004	-.0005	-.0002
2701090271MS	9:53	1.025	1.025	5.104	20.53	21.97	0.5361	0.9941	55.98	0.5339	1.071	0.4162
2701090271MSD	9:57	1.027	1.033	5.124	20.80	22.08	0.5376	0.9994	56.15	0.5329	1.069	0.4222
X701030383	10:01	-.0014	0.0022	0.0817	2.649	14.63	0.0009	0.0049	29.41	-.0000	-.0039	0.0027
CCV	10:11	4.99/5	5.03/5	4.97/5	48.6/50	51.0/50	5.10/5	4.94/5	48.7/50	5.13/5	5.06/5	4.74/5
CCB	10:15	-.0004	0.0004	-.0005	0.0318	0.0001	-.0001	0.0053	-.0191	0.0001	0.0015	0.0021
X701020333	10:18	-.0015	0.0006	0.0055	2.679	14.76	0.0000	0.0018	29.87	-.0005	-.0029	0.0036
2701090265	10:23	-.0012	0.0012	0.0183	0.3921	0.6095	0.0056	0.0009	5.140	0.0000	0.0005	0.0006
2701090267	10:26	-.0013	0.0013	0.0044	0.3321	0.5924	0.0040	0.0009	4.430	0.0002	-.0009	-.0006
2701090264	10:30	-.0012	0.0004	0.0119	0.3707	0.6095	0.0067	0.0006	4.393	0.0004	-.0010	-.0003
2701090258	10:34	-.0012	0.0009	0.0041	0.3225	0.4366	0.0126	0.0004	2.204	0.0001	-.0013	-.0002
2701090270	10:38	-.0011	0.0044	0.2334	0.3576	0.4863	0.0039	0.0005	5.633	0.0005	-.0004	-.0008
2701090272	10:41	-.0011	0.0032	0.2298	0.3582	0.6265	0.0052	0.0005	5.322	0.0003	-.0016	-.0009
2701090269	10:45	-.0012	0.0011	0.0233	0.3785	0.6188	0.0050	0.0004	4.947	0.0003	-.0009	-.0008
2701090526	10:49	-.0015	0.0021	-.0010	3.306	16.55	0.0004	0.0027	72.39	0.0011	-.0044	0.0012
2701090526MS	10:53	1.010	1.021	4.981	23.62	36.42	0.5329	0.9981	118.5	0.5257	1.046	0.4998
CCV	10:57	5.01/5	5.09/5	4.93/5	49.6/50	50.9/50	5.13/5	4.97/5	49.1/50	5.15/5	5.07/5	4.75/5
CCB	11:01	-.0003	0.0006	-.0002	0.0983	0.0004	-.0001	0.0050	-.0164	0.0003	0.0014	0.0023
MCV	11:04	2.52/2.5	2.56/2.5	2.52/2.5	25.2/25	25.9/25	2.62/2.5	2.50/2.5	25.1/25	2.64/2.5	2.58/2.5	2.36/2.5
2701090526MSD	11:08	1.027	1.040	5.043	24.04	36.82	0.5400	1.005	120.4	0.5259	1.049	0.5028
2701090528	11:12	0.0042	0.0113	0.0015	1.942	12.42	-.0002	0.0109	42.17	0.0000	-.0020	0.0022
2701090268	11:16	-.0011	0.0013	0.0237	0.4198	0.6203	0.0052	0.0022	4.991	0.0004	-.0015	0.0004
2701090260	11:19	-.0012	0.0018	0.0244	0.3461	0.4383	0.0102	0.0009	2.233	0.0004	-.0007	-.0023
2701090262	11:23	-.0011	0.0005	0.0055	0.3638	0.6050	0.0072	0.0010	4.467	0.0003	-.0006	-.0005
2701090263	11:27	-.0012	0.0008	0.0160	0.3560	0.5324	0.0030	0.0006	3.904	0.0004	-.0018	0.0004
2701090525	11:30	-.0001	0.0060	0.0165	2.887	13.53	0.0007	0.0053	60.38	0.0004	-.0031	0.0021
2701090261	11:35	-.0011	0.0010	0.0052	0.3586	0.4397	0.0098	0.0003	2.241	0.0005	-.0016	0.0007
2701090435	11:39	-.0017	0.0312	0.0027	3.189	35.53	0.0110	0.0011	94.41	0.0037	-.0037	0.0021
2701090433	11:43	-.0015	0.0256	0.0554	1.925	18.71	0.0046	0.0077	41.31	0.0001	-.0055	0.0024
CCV	11:47	5.00/5	5.09/5	4.92/5	50.1/50	50.6/50	5.12/5	4.98/5	49.4/50	5.15/5	5.04/5	4.72/5
CCB	11:51	-.0004	0.0005	0.0002	0.0598	0.0001	-.0001	0.0041	-.0082	0.0003	0.0003	0.0035
MBLANK	11:55	-.0004	0.0004	-.0004	0.0683	0.0006	-.0001	0.0012	-.0211	0.0008	0.0004	0.0010
LCS	11:59	1.02/1	1.05/1	4.93/5	20.5/20	20.7/20	0.529/.5	1.03/1	50.5/50	0.532/.5	1.05/1	0.464/.5
LCSD	12:02	1.02/1	1.05/1	4.96/5	20.7/20	20.8/20	0.531/.5	1.02/1	50.9/50	0.526/.5	1.04/1	0.459/.5

Landscape Summary File ID: 070110 Date: 1/10/07 Analyst: WBH Page: 5

Sample ID	Time	CR	CU	FE	K	MG	MN	MO	NA	NI	PB	SB
2701090548	12:06	-.0005	0.0070	0.0238	3.644	18.30	0.0007	0.0036	24.76	0.0003	-.0031	0.0051
2701090548MS	12:11	1.024	1.043	5.065	24.86	38.45	0.5387	0.9972	75.73	0.5117	1.056	0.4236
2701090548MSD	12:14	1.016	1.038	5.011	24.31	37.98	0.5349	0.9829	73.92	0.5016	1.036	0.4203
2701090554	12:18	-.0001	0.0077	0.0021	3.598	17.25	-.0002	0.0073	15.79	-.0005	-.0043	0.0029
2701090553	12:22	-.0001	0.0022	0.0002	3.621	17.30	-.0001	0.0042	15.87	-.0007	-.0031	0.0053
2701090571	12:27	0.0022	0.0385	-.0007	2.048	27.86	-.0003	0.0065	36.76	-.0005	-.0055	0.0050
2701090550	12:31	-.0005	0.0038	0.0174	3.571	18.69	0.0005	0.0029	25.39	-.0005	-.0047	0.0023
CCV	12:36	5.01/5	5.18/5	4.95/5	51.2/50	51.1/50	5.14/5	4.99/5	50.5/50	5.15/5	5.05/5	4.76/5
CCB	12:40	-.0002	0.0009	0.0004	0.0921	0.0001	-.0001	0.0040	-.0025	0.0003	0.0003	0.0027
MCV	12:43	2.49/2.5	2.59/2.5	2.47/2.5	25.1/25	25.4/25	2.59/2.5	2.49/2.5	24.9/25	2.61/2.5	2.56/2.5	2.36/2.5
2701090551	12:47	-.0012	0.0029	0.0064	2.858	14.14	0.0004	0.0043	20.30	0.0002	-.0025	0.0022
2701090555	12:51	0.0001	0.0133	0.0015	3.609	17.42	-.0001	0.0046	16.12	0.0143	-.0040	0.0027
2701090552	12:56	-.0008	0.0018	0.0166	2.842	14.33	0.0002	0.0030	20.70	-.0004	-.0044	0.0025
2701090559	13:00	0.0024	0.0012	-.0011	2.045	28.26	-.0003	0.0070	36.94	-.0004	-.0056	0.0007
2701090579	13:05	0.0023	0.0006	-.0008	2.055	28.19	-.0003	0.0067	38.81	-.0004	-.0044	0.0038
2701090266	13:09	-.0012	0.0025	0.0099	0.3677	0.5885	0.0056	0.0005	4.859	0.0006	-.0016	-.0024
2701090266MS	13:13	1.029	1.027	5.044	21.33	21.89	0.5410	1.008	56.52	0.5371	1.079	0.4385
2701090266MSD	13:16	1.020	1.021	5.009	21.23	21.66	0.5363	1.007	55.80	0.5331	1.069	0.4409
2701090527	13:20	-.0013	0.0047	0.0142	3.394	16.51	0.0006	0.0061	72.82	0.0011	-.0037	0.0037
2701090587	13:24	-.0011	0.0003	-.0007	4.299	19.20	-.0001	0.0068	68.76	0.0005	-.0071	0.0034
CCV	13:29	5.10/5	5.16/5	5.03/5	51.4/50	51.9/50	5.23/5	5.07/5	50.6/50	5.26/5	5.20/5	4.87/5
CCB	13:33	-.0003	0.0004	0.0011	0.0651	-.0000	-.0001	0.0043	-.0261	0.0004	0.0008	0.0023
2701090598	13:36	-.0010	0.0002	-.0012	3.284	3.072	-.0003	0.0007	1.072	0.0002	-.0002	0.0015
2701090558	13:40	-.0010	0.0001	-.0019	0.1064	0.8037	-.0004	0.0012	4.405	0.0003	-.0013	-.0002
2701090529	13:44	0.0100	0.0009	-.0002	4.047	26.51	-.0001	0.0069	53.67	-.0007	-.0078	0.0059
2701090304_2X	13:48	0.0320	0.0042	0.1220	31.12	214.1	0.9389	0.1104	%1358.7	0.0111	-.0236	0.0135
2701090303_2X	13:53	0.0010	0.0022	0.3970	30.65	215.0	0.9950	0.2383	%1393.3	0.0320	-.0218	0.0080
2701090163_2X	13:57	0.0330	0.0046	0.1271	31.43	217.1	0.9471	0.1130	%1387.0	0.0113	-.0190	0.0112
2701090170_2X	14:01	0.0011	0.0025	0.3803	31.37	220.6	1.011	0.2414	%1420.8	0.0330	-.0197	0.0166
WASH	14:09	0.0003	0.0002	-.0008	0.0741	0.0007	-.0001	0.0006	0.0604	0.0003	-.0010	-.0003
MBLANK	14:13	0.0002	0.0002	-.0010	0.0764	0.0011	-.0001	0.0005	0.0567	0.0003	-.0011	-.0002
CCV	14:17	5.05/5	5.12/5	4.98/5	50.7/50	51.0/50	5.19/5	5.03/5	50.1/50	5.23/5	5.14/5	4.81/5
CCB	14:23	-.0001	0.0003	-.0012	0.0941	0.0006	-.0001	0.0018	0.0288	0.0003	-.0004	0.0009
MCV	14:27	2.52/2.5	2.54/2.5	2.48/2.5	25.2/25	25.6/25	2.61/2.5	2.53/2.5	25.0/25	2.66/2.5	2.62/2.5	2.40/2.5
LCS	14:30	1.02/1	1.05/1	4.99/5	20.8/20	20.9/20	0.534/.5	1.04/1	51.2/50	0.536/.5	1.07/1	0.473/.5
LCSD	14:34	1.02/1	1.05/1	5.02/5	20.9/20	21.2/20	0.533/.5	1.03/1	51.4/50	0.535/.5	1.07/1	0.471/.5
2701090312	14:38	-.0017	0.0014	0.0260	5.647	32.45	0.0026	0.0073	107.8	0.0006	-.0051	0.0062
2701090312MS	14:42	1.045	1.077	5.156	26.81	52.37	0.5573	1.033	155.6	0.5462	1.073	0.4322
2701090312MSD	14:46	1.038	1.072	5.164	26.89	52.67	0.5534	1.024	155.3	0.5400	1.062	0.4346
X701090313	14:50	-.0014	0.0018	0.0352	5.524	32.10	0.0060	0.0092	106.2	0.0007	-.0065	0.0046
D701090312	14:54	-.0016	0.0041	-.0008	5.559	32.12	0.0007	0.0094	107.2	0.0007	-.0028	0.0055
D701090313	14:59	-.0016	0.0036	-.0016	5.418	31.96	0.0011	0.0083	107.0	0.0005	-.0057	0.0035
MBLANK	15:03	-.0004	0.0011	0.0014	0.0844	0.0033	-.0001	0.0009	0.0761	-.0000	0.0002	0.0015
LCS	15:07	1.03/1	1.07/1	5.01/5	21.0/20	20.9/20	0.538/.5	1.04/1	50.9/50	0.539/.5	1.06/1	0.497/.5
CCV	15:11	5.14/5	5.21/5	5.05/5	51.9/50	52.3/50	5.27/5	5.13/5	50.8/50	5.31/5	5.23/5	4.90/5
CCB	15:20	-.0002	0.0005	-.0000	0.0404	0.0008	-.0001	0.0016	-.0062	0.0004	-.0012	-.0016
LCSD	15:23	0.973/1	1.02/1	4.74/5	20.0/20	20.3/20	0.508/.5	0.978/1	49.3/50	0.508/.5	1.01/1	0.467/.5
2701020011	15:27	0.0002	0.0095	0.0902	0.7072	12.93	0.0096	0.0034	5.800	0.0005	-.0027	0.0036
2701020011MS	15:32	0.9873	1.032	4.925	20.48	31.99	0.5296	0.9934	54.34	0.5068	0.9962	0.4819
2701020011MSD	15:35	0.9810	1.024	4.892	21.17	33.03	0.5262	0.9862	56.50	0.5018	1.018	0.4787

Landscape Summary File ID: 070110 Date: 1/10/07 Analyst: WBH Page: 6

Sample ID	Time	CR	CU	FE	K	MG	MN	MO	NA	NI	PB	SB
2701050179	15:39	-.0010	0.0105	0.0238	21.10	35.43	0.0081	0.0108	66.98	0.0018	-.0037	0.0048
2701040317	15:44	0.0005	0.0398	0.2266	14.53	24.49	0.0487	0.0092	107.4	0.0029	-.0039	0.0030
2701050074_2X	15:48	0.1116	0.0403	1.916	184.5	947.3	1.380	0.5251	%6154.3	0.0424	-.0467	0.0302
2701050058_2X	15:52	1.171	0.0105	6.460	73.97	515.0	0.6218	0.1264	%2869.4	0.0231	-.0278	0.0129
WASH	15:59	0.0006	0.0001	-.0003	0.0665	0.0005	-.0001	0.0005	0.3136	0.0006	-.0025	0.0003
ICSA	16:03	-.002	-.008	96.5/100	0.230	238/250	0.002	-.000	0.653	-.001	-.042	0.013
ICSAB	16:07	0.250/.25	0.253/.25	94.0/100	0.088	238/250	0.257/.25	0.000	0.141	0.467/.5	0.452/.5	0.013
Wash	16:11	0.0005	0.0003	0.0021	0.0730	0.0013	-.0001	0.0004	0.0858	0.0002	-.0008	-.0022
QC-25 1ppm	16:16	1.041	1.048	1.003	10.19	1.076	1.085	1.005	1.175	1.112	1.101	0.9659
ECV	16:20	5.09/5	5.18/5	4.99/5	51.3/50	51.4/50	5.23/5	5.09/5	49.9/50	5.27/5	5.21/5	4.84/5
ECB	16:29	0.0002	0.0003	-.0005	0.0968	0.0008	-.0001	0.0012	0.0282	0.0003	-.0004	0.0006
MRL	16:35	0.011/.01	0.011/.01	0.019/.02	1.10/1	0.110/.1	0.002/.002	0.022/.02	1.08/1	0.023/.02	0.021/.02	0.045/.05
CCB	16:51	0.0000	0.0001	-.0015	0.0487	0.0006	-.0002	0.0002	0.0246	0.0001	-.0013	0.0007
MRL	16:55	0.011/.01	0.011/.01	0.020/.02	1.09/1	0.108/.1	0.002/.002	0.021/.02	1.07/1	0.023/.02	0.022/.02	0.042/.05

Nebulizer Parameters: Hg_ReAlign

Analyte	Back Pressure	Flow
All	170.0 kPa	0.54 L/min

1/10/2007 08:04:29 Hg ReAlign... Actual peak offset (nm): 0.004
Drift (nm): -0.001 Slit adjustment: -2

Align View XY Axial for analyte Mn 257.610

X-position	Y-position	Intensity
-2.0	15.0	279726.7
-1.6	15.0	405548.4
-1.2	15.0	527636.3
-0.8	15.0	639776.5
-0.4	15.0	733483.8
0.0	15.0	742954.4
0.4	15.0	713572.4
0.8	15.0	612986.3
1.2	15.0	512539.2
1.6	15.0	407753.0
2.0	15.0	307706.0
0.0	10.0	10612.6
0.0	10.5	33505.3
0.0	11.0	56902.6
0.0	11.5	90941.3
0.0	12.0	133717.8
0.0	12.5	271183.5
0.0	13.0	370785.8
0.0	13.5	471276.7
0.0	14.0	592233.4
0.0	14.5	733653.8
0.0	15.0	745406.4
0.0	15.5	687845.5
0.0	16.0	598430.7
0.0	16.5	389424.6
0.0	17.0	296333.3
0.0	17.5	203139.8
0.0	18.0	141516.0
0.0	18.5	95697.7
0.0	19.0	32125.3
0.0	19.5	13587.7
0.0	20.0	5760.3
-0.8	15.0	639840.6
-0.4	15.0	716847.7
0.0	15.0	745982.0
0.4	15.0	698049.3
0.8	15.0	610765.3
0.0	13.0	384415.6
0.0	13.5	470367.8
0.0	14.0	578267.4
0.0	14.5	734107.9
0.0	15.0	755416.8
0.0	15.5	714900.5
0.0	16.0	600753.9
0.0	16.5	391493.1
0.0	17.0	285048.0

1/10/2007 08:18:49 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 755416.8 for Axial viewing
Y viewing position set to 15.0 mm having Peak intensity 755416.8 for Axial viewing

Align View X Radial for analyte Mn 257.610

X-position	Y-position	Intensity
-7.0	15.0	2719.8
-6.5	15.0	3282.6
-6.0	15.0	3117.7
-5.5	15.0	3173.8
-5.0	15.0	3663.7

-4.5	15.0	5255.8
-4.0	15.0	9359.2
-3.5	15.0	17252.7
-3.0	15.0	31198.7
-2.5	15.0	52960.3
-2.0	15.0	72928.3
-1.5	15.0	85587.2
-1.0	15.0	90184.0
-0.5	15.0	106615.3
0.0	15.0	140174.3
0.5	15.0	113371.2
1.0	15.0	77862.8
1.5	15.0	54993.4
2.0	15.0	40234.9
2.5	15.0	27747.4
3.0	15.0	17627.9
3.5	15.0	10472.9
4.0	15.0	6368.3
4.5	15.0	5928.9
5.0	15.0	4903.6
5.5	15.0	3365.5
6.0	15.0	2071.3
6.5	15.0	1370.0
7.0	15.0	1123.1

1/10/2007 08:21:43 aligned for analyte Mn 257.610
X viewing position set to 0.0 mm having Peak intensity 140174.3 for Radial viewing

Analysis Begun

Start Time: 1/10/2007 08:40:30 Plasma On Time: 1/10/2007 07:01:52
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\070110.sif
Batch ID: 070110
Results Data Set: 070110
Results Library: C:\pe\Owner\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 0
Sample ID: Calib Blank 1 Date Collected: 1/10/2007 08:40:30
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	226.0 kPa	0.65 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sca	454312.9	3279.78	0.72%	100	%
Yr	361898.5	1354.86	0.37%	100	%
Agt	239.6	59.69	24.91%	[0.00]	mg/L
Alt	130.7	14.26	10.91%	[0.00]	mg/L
Ast	-0.1	0.62	457.31%	[0.00]	mg/L
B_t	179.9	2.81	1.56%	[0.00]	mg/L
Bat	-18.3	3.38	18.49%	[0.00]	mg/L
Bet	-4366.7	80.47	1.84%	[0.00]	mg/L
Cat	1036.6	13.55	1.31%	[0.00]	mg/L
Cdt	47.4	0.50	1.06%	[0.00]	mg/L
Cot	-56.8	4.77	8.40%	[0.00]	mg/L
Crt	342.3	6.90	2.01%	[0.00]	mg/L
Cut	2527.2	49.76	1.97%	[0.00]	mg/L
Fet	-18.0	2.35	13.04%	[0.00]	mg/L
Kt	182.5	3.53	1.94%	[0.00]	mg/L
Mgt	44.6	7.69	17.25%	[0.00]	mg/L
Mnt	239.8	3.93	1.64%	[0.00]	mg/L
Mot	16.5	0.32	1.93%	[0.00]	mg/L
Nat	-1174.5	23.16	1.97%	[0.00]	mg/L
Nit	-63.6	7.97	12.52%	[0.00]	mg/L
Pbt	-17.1	4.12	24.06%	[0.00]	mg/L
Sbt	10.9	1.78	16.28%	[0.00]	mg/L
Set	-4.8	5.24	109.95%	[0.00]	mg/L
Tlt	-17.5	1.02	5.84%	[0.00]	mg/L
Vt	117.2	15.61	13.32%	[0.00]	mg/L
Znt	107.7	4.49	4.17%	[0.00]	mg/L
Alxt	407.6	1.84	0.45%	[0.00]	ug/L
Bext	-4366.7	80.47	1.84%	[0.00]	ug/L

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

Autosampler Location: 15
Date Collected: 1/10/2007 08:44:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Standard 2

Analyte	Back Pressure	Flow
All	225.0 kPa	0.65 L/min

Mean Data: Standard 2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sca	416000.0	933.03	0.22%	91.6	%
Yr	348275.2	2005.88	0.58%	96.2	%
Agt	538660.2	105.66	0.02%	[2]	mg/L
Alt	47201.8	312.66	0.66%	[10]	mg/L
Ast	21004.9	0.66	0.00%	[10]	mg/L
B_t	149531.9	203.23	0.14%	[5.02]	mg/L
Bat	717817.7	1643.67	0.23%	[10]	mg/L
Bet	11040249.4	1205.67	0.01%	[4.01]	mg/L
Cat	1455029.8	7713.42	0.53%	[100]	mg/L
Cdt	132258.7	143.50	0.11%	[5.01]	mg/L
Cot	262784.2	466.09	0.18%	[10]	mg/L
Crt	748730.4	425.01	0.06%	[9.97]	mg/L
Cut	3707791.8	11486.27	0.31%	[10]	mg/L
Fet	42825.1	5.78	0.01%	[9.98]	mg/L
Kt	137100.9	661.98	0.48%	[100]	mg/L
Mgt	1004448.9	6679.38	0.66%	[100]	mg/L
Mnt	5408034.1	10078.68	0.19%	[10]	mg/L
Mot	132586.1	307.40	0.23%	[9.98]	mg/L
Nat	376698.9	1868.69	0.50%	[100]	mg/L
Nit	213981.3	104.83	0.05%	[10]	mg/L
Pbt	45298.1	209.31	0.46%	[10]	mg/L
Sbt	21065.8	30.49	0.14%	[10]	mg/L
Set	13134.5	61.63	0.47%	[10]	mg/L
Tlt	28428.6	116.90	0.41%	[10]	mg/L
Vt	1637547.6	45.92	0.00%	[10]	mg/L
Znt	466200.7	100.84	0.02%	[10]	mg/L
Alxt	975143.4	997.41	0.10%	[10000]	ug/L
Bext	11040249.4	1205.67	0.01%	[4010]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag	1	Lin, Calc Int	0.0	269300	0.00000	1.000000	
Al	1	Lin, Calc Int	0.0	4720	0.00000	1.000000	
As	1	Lin, Calc Int	0.0	2100	0.00000	1.000000	
B_	1	Lin, Calc Int	0.0	29790	0.00000	1.000000	
Ba	1	Lin, Calc Int	0.0	71780	0.00000	1.000000	
Be	1	Lin, Calc Int	0.0	2753000	0.00000	1.000000	
Ca	1	Lin, Calc Int	0.0	14550	0.00000	1.000000	
Cd	1	Lin, Calc Int	0.0	26400	0.00000	1.000000	
Co	1	Lin, Calc Int	0.0	26280	0.00000	1.000000	
Cr	1	Lin, Calc Int	-0.0	75100	0.00000	1.000000	
Cu	1	Lin, Calc Int	0.0	370800	0.00000	1.000000	
Fe	1	Lin, Calc Int	0.0	4291	0.00000	1.000000	
K	1	Lin, Calc Int	0.0	1371	0.00000	1.000000	
Mg	1	Lin, Calc Int	0.0	10040	0.00000	1.000000	
Mn	1	Lin, Calc Int	0.0	540800	0.00000	1.000000	
Mo	1	Lin, Calc Int	0.0	13290	0.00000	1.000000	
Na	1	Lin, Calc Int	-0.0	3767	0.00000	1.000000	
Ni	1	Lin, Calc Int	0.0	21400	0.00000	1.000000	
Pb	1	Lin, Calc Int	-0.0	4530	0.00000	1.000000	
Sb	1	Lin, Calc Int	0.0	2107	0.00000	1.000000	
Se	1	Lin, Calc Int	0.0	1313	0.00000	1.000000	

Tl	1	Lin, Calc Int	0.0	2843	0.00000	1.000000
V	1	Lin, Calc Int	0.0	163800	0.00000	1.000000
Zn	1	Lin, Calc Int	0.0	46620	0.00000	1.000000
Alx	1	Lin, Calc Int	0.0	97.51	0.00000	1.000000
Bex	1	Lin, Calc Int	-0.0	2753	0.00000	1.000000

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

Autosampler Location: 15
Date Collected: 1/10/2007 08:47:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICV

Analyte	Back Pressure	Flow
All	226.0 kPa	0.65 L/min

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	412500.6	90.8	%	0.09				0.10%
Yr	338155.2	93.4	%	0.34				0.36%
Ag†	539329.4	2.00	mg/L	0.001	2.00	mg/L	0.001	0.05%
QC value within limits for Ag	Recovery = 100.12%							
Al†	47094.5	9.55	mg/L	0.029	9.55	mg/L	0.029	0.30%
QC value within limits for Al	Recovery = 95.48%							
As†	20765.2	9.92	mg/L	0.004	9.92	mg/L	0.004	0.05%
QC value within limits for As	Recovery = 99.18%							
B_†	150269.6	5.02	mg/L	0.004	5.02	mg/L	0.004	0.09%
QC value within limits for B_	Recovery = 100.47%							
Ba†	719452.2	10.0	mg/L	0.01	10.0	mg/L	0.01	0.07%
QC value within limits for Ba	Recovery = 100.28%							
Be†	11025069.2	4.01	mg/L	0.008	4.01	mg/L	0.008	0.20%
QC value within limits for Be	Recovery = 100.14%							
Ca†	1483047.0	102	mg/L	1.9	102	mg/L	1.9	1.90%
QC value within limits for Ca	Recovery = 101.93%							
Cd†	132365.7	4.92	mg/L	0.001	4.92	mg/L	0.001	0.02%
QC value within limits for Cd	Recovery = 98.39%							
Co†	262986.3	10.0	mg/L	0.00	10.0	mg/L	0.00	0.03%
QC value within limits for Co	Recovery = 100.08%							
Cr†	750484.1	9.99	mg/L	0.023	9.99	mg/L	0.023	0.23%
QC value within limits for Cr	Recovery = 99.93%							
Cu†	3714064.5	10.0	mg/L	0.03	10.0	mg/L	0.03	0.28%
QC value within limits for Cu	Recovery = 100.21%							
Fe†	42836.2	9.99	mg/L	0.016	9.99	mg/L	0.016	0.16%
QC value within limits for Fe	Recovery = 99.87%							
K†	136448.7	99.5	mg/L	0.01	99.5	mg/L	0.01	0.01%
QC value within limits for K	Recovery = 99.52%							
Mg†	1019792.6	102	mg/L	0.2	102	mg/L	0.2	0.20%
QC value within limits for Mg	Recovery = 101.54%							
Mn†	5418656.3	10.0	mg/L	0.01	10.0	mg/L	0.01	0.09%
QC value within limits for Mn	Recovery = 100.22%							
Mo†	133099.2	10.0	mg/L	0.02	10.0	mg/L	0.02	0.20%
QC value within limits for Mo	Recovery = 100.19%							
Na†	374644.4	99.5	mg/L	0.03	99.5	mg/L	0.03	0.03%
QC value within limits for Na	Recovery = 99.45%							
Ni†	214546.1	10.0	mg/L	0.02	10.0	mg/L	0.02	0.23%
QC value within limits for Ni	Recovery = 100.23%							
Pb†	45062.2	9.95	mg/L	0.010	9.95	mg/L	0.010	0.10%
QC value within limits for Pb	Recovery = 99.48%							
Sb†	20933.2	9.74	mg/L	0.050	9.74	mg/L	0.050	0.51%
QC value within limits for Sb	Recovery = 97.44%							
Se†	13006.2	9.93	mg/L	0.058	9.93	mg/L	0.058	0.58%
QC value within limits for Se	Recovery = 99.26%							
Tl†	28293.9	9.94	mg/L	0.008	9.94	mg/L	0.008	0.08%
QC value within limits for Tl	Recovery = 99.37%							
V†	1640257.3	10.1	mg/L	0.02	10.1	mg/L	0.02	0.16%
QC value within limits for V	Recovery = 100.67%							
Zn†	467684.6	9.97	mg/L	0.000	9.97	mg/L	0.000	0.00%
QC value within limits for Zn	Recovery = 99.71%							
Alx†	971415.6	9960	ug/L	44.9	9.96	mg/L	0.045	0.45%
QC value within limits for Alx	Recovery = 99.62%							
Bex†	11025069.2	4000	ug/L	8.0	4.00	mg/L	0.008	0.20%
QC value within limits for Bex	Recovery = 100.11%							

All analyte(s) passed QC.

Sequence No.: 4
Sample ID: Linearity Check
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 1/10/2007 08:51:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Linearity Check

Analyte	Back Pressure	Flow
All	226.0 kPa	0.65 L/min

Mean Data: Linearity Check

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	389832.3	85.8	%	0.87				1.02%
Yr	330843.0	91.4	%	0.18				0.20%
Agt	-10340.0	-0.0384	mg/L	0.00017	-0.0384	mg/L	0.00017	0.45%
QC value within limits for Ag	Recovery = Not calculated							
Alt	-39.2	-0.00874	mg/L	0.010316	-0.00874	mg/L	0.010316	118.05%
QC value within limits for Al	Recovery = Not calculated							
Ast	-247.6	-0.118	mg/L	0.0029	-0.118	mg/L	0.0029	2.42%
QC value within limits for As	Recovery = Not calculated							
B_t	808.8	0.0271	mg/L	0.00559	0.0271	mg/L	0.00559	20.59%
QC value within limits for B_	Recovery = Not calculated							
Bat	114.3	0.00159	mg/L	0.000159	0.00159	mg/L	0.000159	9.99%
QC value within limits for Ba	Recovery = Not calculated							
Bet	-1056.9	-0.00038	mg/L	0.000016	-0.00038	mg/L	0.000016	4.19%
QC value within limits for Be	Recovery = Not calculated							
Cat	4224271.7	290	mg/L	1.1	290	mg/L	1.1	0.39%
QC value within limits for Ca	Recovery = 96.77%							
Cdt	-24.6	0.00068	mg/L	0.000073	0.00068	mg/L	0.000073	10.72%
QC value within limits for Cd	Recovery = Not calculated							
Cot	62.9	0.00239	mg/L	0.000112	0.00239	mg/L	0.000112	4.70%
QC value within limits for Co	Recovery = Not calculated							
Crt	-105.6	-0.00141	mg/L	0.000296	-0.00141	mg/L	0.000296	21.06%
QC value within limits for Cr	Recovery = Not calculated							
Cut	-561.5	-0.00152	mg/L	0.000161	-0.00152	mg/L	0.000161	10.59%
QC value within limits for Cu	Recovery = Not calculated							
Fet	411009.8	95.8	mg/L	0.36	95.8	mg/L	0.36	0.37%
QC value within limits for Fe	Recovery = 95.78%							
Kt	415759.7	303	mg/L	1.9	303	mg/L	1.9	0.64%
QC value within limits for K	Recovery = 101.08%							
Mgt	1895897.9	189	mg/L	0.5	189	mg/L	0.5	0.28%
QC value within limits for Mg	Recovery = Not calculated							
Mnt	1424.9	0.00998	mg/L	0.000002	0.00998	mg/L	0.000002	0.02%
QC value within limits for Mn	Recovery = Not calculated							
Mot	135.9	0.0102	mg/L	0.00195	0.0102	mg/L	0.00195	19.06%
QC value within limits for Mo	Recovery = Not calculated							
Nat	1112289.9	295	mg/L	1.3	295	mg/L	1.3	0.44%
QC value within limits for Na	Recovery = 98.42%							
Nit	-18.4	-0.00088	mg/L	0.000366	-0.00088	mg/L	0.000366	41.70%
QC value within limits for Ni	Recovery = Not calculated							
Pbt	-18.4	-0.00407	mg/L	0.001749	-0.00407	mg/L	0.001749	42.95%
QC value within limits for Pb	Recovery = Not calculated							
Sbt	37.5	0.0178	mg/L	0.00062	0.0178	mg/L	0.00062	3.50%
QC value within limits for Sb	Recovery = Not calculated							
Set	-390.0	-0.0713	mg/L	0.00386	-0.0713	mg/L	0.00386	5.41%
QC value within limits for Se	Recovery = Not calculated							
Tlt	153.6	-0.0508	mg/L	0.00084	-0.0508	mg/L	0.00084	1.66%
QC value within limits for Tl	Recovery = Not calculated							
Vt	-270.6	0.00187	mg/L	0.000151	0.00187	mg/L	0.000151	8.04%
QC value within limits for V	Recovery = Not calculated							
Znt	678.3	0.0146	mg/L	0.00011	0.0146	mg/L	0.00011	0.79%
QC value within limits for Zn	Recovery = Not calculated							
Alxt	438.3	4.49	ug/L	0.154	0.00449	mg/L	0.000154	3.43%
QC value within limits for Alx	Recovery = Not calculated							
Bext	-1056.9	-0.384	ug/L	0.0161	-0.00038	mg/L	0.000016	4.18%
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: 1/10/2007 08:54:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	226.0 kPa	0.65 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	403686.9	88.9	%	0.55				0.62%
Yr	338467.5	93.5	%	0.26				0.28%
Ag†	-10259.9	-0.0381	mg/L	0.00033	-0.0381	mg/L	0.00033	0.85%
QC value within limits for Ag	Recovery = Not calculated							
Al†	1144489.9	242	mg/L	1.9	242	mg/L	1.9	0.77%
QC value within limits for Al	Recovery = 96.99%							
As†	-526.9	-0.251	mg/L	0.0020	-0.251	mg/L	0.0020	0.81%
QC value within limits for As	Recovery = Not calculated							
B_†	2242.9	0.0753	mg/L	0.00105	0.0753	mg/L	0.00105	1.39%
QC value within limits for B_	Recovery = Not calculated							
Ba†	178.4	0.00248	mg/L	0.000035	0.00248	mg/L	0.000035	1.42%
QC value within limits for Ba	Recovery = Not calculated							
Be†	-943.7	-0.00034	mg/L	0.000016	-0.00034	mg/L	0.000016	4.69%
QC value within limits for Be	Recovery = Not calculated							
Ca†	3609537.2	248	mg/L	0.4	248	mg/L	0.4	0.14%
QC value within limits for Ca	Recovery = 99.23%							
Cd†	-39.2	0.00193	mg/L	0.000228	0.00193	mg/L	0.000228	11.77%
QC value within limits for Cd	Recovery = Not calculated							
Co†	51.0	0.00194	mg/L	0.000162	0.00194	mg/L	0.000162	8.35%
QC value within limits for Co	Recovery = Not calculated							
Cr†	-120.0	-0.00160	mg/L	0.000220	-0.00160	mg/L	0.000220	13.78%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	-439.7	-0.00119	mg/L	0.000239	-0.00119	mg/L	0.000239	20.19%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	409850.2	95.5	mg/L	0.46	95.5	mg/L	0.46	0.49%
QC value within limits for Fe	Recovery = 95.51%							
K†	406.2	0.296	mg/L	0.0207	0.296	mg/L	0.0207	6.99%
QC value within limits for K	Recovery = Not calculated							
Mg†	2372241.5	236	mg/L	0.3	236	mg/L	0.3	0.13%
QC value within limits for Mg	Recovery = 94.52%							
Mn†	1266.4	0.00235	mg/L	0.000042	0.00235	mg/L	0.000042	1.80%
QC value within limits for Mn	Recovery = Not calculated							
Mo†	28.8	0.00217	mg/L	0.000250	0.00217	mg/L	0.000250	11.54%
QC value within limits for Mo	Recovery = Not calculated							
Na†	224.5	0.0596	mg/L	0.00686	0.0596	mg/L	0.00686	11.51%
QC value within limits for Na	Recovery = Not calculated							
Ni†	-17.2	-0.00082	mg/L	0.000058	-0.00082	mg/L	0.000058	7.16%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	-181.8	-0.0401	mg/L	0.00074	-0.0401	mg/L	0.00074	1.84%
QC value within limits for Pb	Recovery = Not calculated							
Sb†	21.3	0.0101	mg/L	0.00230	0.0101	mg/L	0.00230	22.68%
QC value within limits for Sb	Recovery = Not calculated							
Se†	-402.2	-0.0812	mg/L	0.00053	-0.0812	mg/L	0.00053	0.66%
QC value within limits for Se	Recovery = Not calculated							
Tl†	98.2	-0.0551	mg/L	0.00638	-0.0551	mg/L	0.00638	11.59%
QC value within limits for Tl	Recovery = Not calculated							
V†	-248.0	0.00200	mg/L	0.000096	0.00200	mg/L	0.000096	4.79%
QC value within limits for V	Recovery = Not calculated							
Zn†	772.2	0.0166	mg/L	0.00019	0.0166	mg/L	0.00019	1.17%
QC value within limits for Zn	Recovery = Not calculated							
Alx†	Saturated2							
Unable to evaluate QC.								
Bex†	-943.7	-0.343	ug/L	0.0161	-0.00034	mg/L	0.000016	4.70%
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: 1/10/2007 08:58:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	226.0 kPa	0.65 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	402358.4	88.6	%	0.51				0.58%
Yr	333146.0	92.1	%	0.52				0.57%
Ag†	126157.4	0.468	mg/L	0.0014	0.468	mg/L	0.0014	0.31%
QC value within limits for Ag Recovery = 93.68%								
Al†	1135903.0	241	mg/L	4.0	241	mg/L	4.0	1.65%
QC value within limits for Al Recovery = 96.26%								
As†	-502.4	-0.238	mg/L	0.0020	-0.238	mg/L	0.0020	0.85%
QC value less than the lower limit for As Recovery = Not calculated								
B_†	2138.1	0.0713	mg/L	0.00038	0.0713	mg/L	0.00038	0.54%
QC value greater than the upper limit for B_ Recovery = Not calculated								
Ba†	18121.0	0.253	mg/L	0.0005	0.253	mg/L	0.0005	0.21%
QC value within limits for Ba Recovery = 101.03%								
Be†	689931.0	0.251	mg/L	0.0013	0.251	mg/L	0.0013	0.50%
QC value within limits for Be Recovery = 100.25%								
Ca†	3587577.2	247	mg/L	3.6	247	mg/L	3.6	1.48%
QC value within limits for Ca Recovery = 98.63%								
Cd†	12629.3	0.483	mg/L	0.0021	0.483	mg/L	0.0021	0.44%
QC value within limits for Cd Recovery = 96.52%								
Co†	6041.2	0.230	mg/L	0.0012	0.230	mg/L	0.0012	0.51%
QC value within limits for Co Recovery = 91.96%								
Cr†	18217.8	0.243	mg/L	0.0004	0.243	mg/L	0.0004	0.18%
QC value within limits for Cr Recovery = 97.03%								
Cu†	91451.2	0.247	mg/L	0.0008	0.247	mg/L	0.0008	0.34%
QC value within limits for Cu Recovery = 98.73%								
Fe†	405223.6	94.4	mg/L	0.09	94.4	mg/L	0.09	0.09%
QC value within limits for Fe Recovery = 94.43%								
K†	118.5	0.0864	mg/L	0.02841	0.0864	mg/L	0.02841	32.88%
QC value within limits for K Recovery = Not calculated								
Mg†	2376775.3	237	mg/L	3.4	237	mg/L	3.4	1.43%
QC value within limits for Mg Recovery = 94.70%								
Mn†	135734.0	0.251	mg/L	0.0010	0.251	mg/L	0.0010	0.41%
QC value within limits for Mn Recovery = 100.40%								
Mo†	19.5	0.00147	mg/L	0.000043	0.00147	mg/L	0.000043	2.94%
QC value within limits for Mo Recovery = Not calculated								
Na†	-66.1	-0.0175	mg/L	0.00381	-0.0175	mg/L	0.00381	21.72%
QC value within limits for Na Recovery = Not calculated								
Ni†	9805.0	0.458	mg/L	0.0023	0.458	mg/L	0.0023	0.49%
QC value within limits for Ni Recovery = 91.64%								
Pb†	2007.3	0.443	mg/L	0.0032	0.443	mg/L	0.0032	0.72%
QC value within limits for Pb Recovery = 88.63%								
Sb†	27.1	0.00845	mg/L	0.007331	0.00845	mg/L	0.007331	86.76%
QC value within limits for Sb Recovery = Not calculated								
Se†	-391.8	-0.0758	mg/L	0.00621	-0.0758	mg/L	0.00621	8.19%
QC value within limits for Se Recovery = Not calculated								
Tl†	57.0	-0.0676	mg/L	0.00361	-0.0676	mg/L	0.00361	5.34%
QC value less than the lower limit for Tl Recovery = Not calculated								
V†	39183.3	0.244	mg/L	0.0007	0.244	mg/L	0.0007	0.28%
QC value within limits for V Recovery = 97.55%								
Zn†	23962.5	0.511	mg/L	0.0017	0.511	mg/L	0.0017	0.34%
QC value within limits for Zn Recovery = 102.24%								
Alx†	Saturated2							
Unable to evaluate QC.								
Bex†	689931.0	251	ug/L	1.3	0.251	mg/L	0.0013	0.50%
QC value within limits for Bex Recovery = 100.24%								

QC Failed. Continue with analysis.

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

Autosampler Location: 0
Date Collected: 1/10/2007 09:02:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: Wash

Analyte	Back Pressure	Flow
All	226.0 kPa	0.65 L/min

Mean Data: Wash

Analyte	Mean Corrected Intensity	Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	447213.8	98.4	%	0.05				0.06%
Yr	347834.9	96.1	%	0.20				0.21%
Ag†	48.5	0.00018	mg/L	0.000059	0.00018	mg/L	0.000059	32.65%
QC value within limits for Ag	Recovery = Not calculated							
Al†	-4.6	-0.00102	mg/L	0.002424	-0.00102	mg/L	0.002424	238.51%
QC value within limits for Al	Recovery = Not calculated							
As†	1.9	0.00090	mg/L	0.000699	0.00090	mg/L	0.000699	77.96%
QC value within limits for As	Recovery = Not calculated							
B_†	173.3	0.00582	mg/L	0.000028	0.00582	mg/L	0.000028	0.48%
QC value within limits for B_	Recovery = Not calculated							
Ba†	-5.7	-0.00008	mg/L	0.000068	-0.00008	mg/L	0.000068	85.38%
QC value within limits for Ba	Recovery = Not calculated							
Be†	41.9	0.00002	mg/L	0.000003	0.00002	mg/L	0.000003	21.81%
QC value within limits for Be	Recovery = Not calculated							
Ca†	40.5	0.00278	mg/L	0.000239	0.00278	mg/L	0.000239	8.59%
QC value within limits for Ca	Recovery = Not calculated							
Cd†	7.7	0.00028	mg/L	0.000083	0.00028	mg/L	0.000083	29.66%
QC value within limits for Cd	Recovery = Not calculated							
Co†	-4.3	-0.00016	mg/L	0.000226	-0.00016	mg/L	0.000226	138.52%
QC value within limits for Co	Recovery = Not calculated							
Cr†	-5.2	-0.00007	mg/L	0.000122	-0.00007	mg/L	0.000122	176.97%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	183.0	0.00049	mg/L	0.000058	0.00049	mg/L	0.000058	11.85%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	3.7	0.00086	mg/L	0.001065	0.00086	mg/L	0.001065	124.04%
QC value within limits for Fe	Recovery = Not calculated							
K†	33.5	0.0244	mg/L	0.02448	0.0244	mg/L	0.02448	100.20%
QC value within limits for K	Recovery = Not calculated							
Mg†	7.7	0.00077	mg/L	0.000230	0.00077	mg/L	0.000230	30.06%
QC value within limits for Mg	Recovery = Not calculated							
Mn†	7.4	0.00001	mg/L	0.000006	0.00001	mg/L	0.000006	39.02%
QC value within limits for Mn	Recovery = Not calculated							
Mo†	10.7	0.00081	mg/L	0.000129	0.00081	mg/L	0.000129	15.97%
QC value within limits for Mo	Recovery = Not calculated							
Na†	-94.1	-0.0250	mg/L	0.00311	-0.0250	mg/L	0.00311	12.47%
QC value within limits for Na	Recovery = Not calculated							
Ni†	2.7	0.00012	mg/L	0.000155	0.00012	mg/L	0.000155	124.54%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	8.7	0.00193	mg/L	0.000517	0.00193	mg/L	0.000517	26.86%
QC value within limits for Pb	Recovery = Not calculated							
Sb†	-1.7	-0.00081	mg/L	0.002731	-0.00081	mg/L	0.002731	337.57%
QC value within limits for Sb	Recovery = Not calculated							
Se†	-2.6	-0.00199	mg/L	0.003449	-0.00199	mg/L	0.003449	173.61%
QC value within limits for Se	Recovery = Not calculated							
Tl†	1.6	0.00056	mg/L	0.000849	0.00056	mg/L	0.000849	151.24%
QC value within limits for Tl	Recovery = Not calculated							
V†	44.3	0.00027	mg/L	0.000156	0.00027	mg/L	0.000156	57.52%
QC value within limits for V	Recovery = Not calculated							
Zn†	12.8	0.00027	mg/L	0.000063	0.00027	mg/L	0.000063	22.89%
QC value within limits for Zn	Recovery = Not calculated							
Alx†	43.5	0.446	ug/L	0.2472	0.00045	mg/L	0.000247	55.44%
QC value within limits for Alx	Recovery = Not calculated							
Bex†	41.9	0.0152	ug/L	0.00334	0.00002	mg/L	0.000003	21.92%
QC value within limits for Bex	Recovery = Not calculated							

All analyte(s) passed QC.

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

Autosampler Location: 12
Date Collected: 1/10/2007 09:05:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: QC-25 1ppm

Analyte	Back Pressure	Flow
All	226.0 kPa	0.65 L/min

Mean Data: QC-25 1ppm

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	446069.2	98.2	%	0.10				0.10%
Yr	354280.9	97.9	%	0.79				0.80%
Agt	266568.1	0.990	mg/L	0.0058	0.990	mg/L	0.0058	0.58%
QC value within limits for Ag Recovery = 98.97%								
Alt	4838.8	0.983	mg/L	0.0176	0.983	mg/L	0.0176	1.79%
QC value within limits for Al Recovery = 98.28%								
Ast	2054.2	0.981	mg/L	0.0022	0.981	mg/L	0.0022	0.23%
QC value within limits for As Recovery = 98.11%								
B_t	28054.1	0.940	mg/L	0.0003	0.940	mg/L	0.0003	0.04%
QC value within limits for B_ Recovery = 93.95%								
Bat	77102.2	1.07	mg/L	0.004	1.07	mg/L	0.004	0.41%
QC value within limits for Ba Recovery = 107.47%								
Bet	2718740.2	0.988	mg/L	0.0036	0.988	mg/L	0.0036	0.36%
QC value within limits for Be Recovery = 98.76%								
Cat	15342.5	1.05	mg/L	0.020	1.05	mg/L	0.020	1.94%
QC value within limits for Ca Recovery = 105.44%								
Cdt	26411.1	0.991	mg/L	0.0008	0.991	mg/L	0.0008	0.08%
QC value within limits for Cd Recovery = 99.14%								
Cot	28182.3	1.07	mg/L	0.008	1.07	mg/L	0.008	0.71%
QC value within limits for Co Recovery = 107.25%								
Crt	77549.7	1.03	mg/L	0.006	1.03	mg/L	0.006	0.59%
QC value within limits for Cr Recovery = 103.26%								
Cut	378690.8	1.02	mg/L	0.000	1.02	mg/L	0.000	0.00%
QC value within limits for Cu Recovery = 102.18%								
Fet	4406.4	1.03	mg/L	0.015	1.03	mg/L	0.015	1.45%
QC value within limits for Fe Recovery = 102.73%								
Kt	13719.6	10.0	mg/L	0.18	10.0	mg/L	0.18	1.75%
QC value within limits for K Recovery = 100.07%								
Mgt	11001.3	1.10	mg/L	0.020	1.10	mg/L	0.020	1.83%
QC value within limits for Mg Recovery = 109.65%								
Mnt	576698.1	1.07	mg/L	0.002	1.07	mg/L	0.002	0.19%
QC value within limits for Mn Recovery = 106.66%								
Mot	13112.5	0.987	mg/L	0.0006	0.987	mg/L	0.0006	0.06%
QC value within limits for Mo Recovery = 98.70%								
Nat	3824.0	1.02	mg/L	0.025	1.02	mg/L	0.025	2.45%
QC value within limits for Na Recovery = 101.51%								
Nit	23576.8	1.10	mg/L	0.006	1.10	mg/L	0.006	0.55%
QC value greater than the upper limit for Ni Recovery = 110.15%								
Pbt	4923.4	1.09	mg/L	0.001	1.09	mg/L	0.001	0.13%
QC value within limits for Pb Recovery = 108.69%								
Sbt	2083.3	0.969	mg/L	0.0007	0.969	mg/L	0.0007	0.07%
QC value within limits for Sb Recovery = 96.90%								
Set	1246.2	0.951	mg/L	0.0052	0.951	mg/L	0.0052	0.54%
QC value within limits for Se Recovery = 95.12%								
Tlt	3097.5	1.09	mg/L	0.001	1.09	mg/L	0.001	0.07%
QC value within limits for Tl Recovery = 109.15%								
Vt	164067.5	1.01	mg/L	0.006	1.01	mg/L	0.006	0.62%
QC value within limits for V Recovery = 100.71%								
Znt	49053.0	1.05	mg/L	0.006	1.05	mg/L	0.006	0.55%
QC value within limits for Zn Recovery = 104.55%								
Alxt	95619.8	981	ug/L	3.0	0.981	mg/L	0.0030	0.31%
QC value within limits for Alx Recovery = 98.06%								
Bext	2718740.2	987	ug/L	3.6	0.987	mg/L	0.0036	0.36%
QC value within limits for Bex Recovery = 98.75%								

QC Failed. Retry.

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

Autosampler Location: 12
Date Collected: 1/10/2007 09:08:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: QC-25 1ppm

Analyte	Back Pressure	Flow
All	225.0 kPa	0.65 L/min

Mean Data: QC-25 1ppm

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	446859.6	98.4	%	0.34				0.35%
Yr	358722.0	99.1	%	0.55				0.55%
Agt	264433.6	0.982	mg/L	0.0128	0.982	mg/L	0.0128	1.31%
QC value within limits for Ag	Recovery = 98.18%							
Alt	4713.5	0.956	mg/L	0.0107	0.956	mg/L	0.0107	1.11%
QC value within limits for Al	Recovery = 95.60%							
Ast	2066.9	0.987	mg/L	0.0118	0.987	mg/L	0.0118	1.19%
QC value within limits for As	Recovery = 98.72%							
B_t	28155.6	0.943	mg/L	0.0090	0.943	mg/L	0.0090	0.95%
QC value within limits for B_	Recovery = 94.30%							
Bat	76511.2	1.07	mg/L	0.009	1.07	mg/L	0.009	0.84%
QC value within limits for Ba	Recovery = 106.65%							
Bet	2708528.9	0.984	mg/L	0.0032	0.984	mg/L	0.0032	0.33%
QC value within limits for Be	Recovery = 98.39%							
Cat	14908.3	1.02	mg/L	0.017	1.02	mg/L	0.017	1.61%
QC value within limits for Ca	Recovery = 102.46%							
Cdt	26269.1	0.986	mg/L	0.0060	0.986	mg/L	0.0060	0.61%
QC value within limits for Cd	Recovery = 98.59%							
Cot	27898.1	1.06	mg/L	0.008	1.06	mg/L	0.008	0.78%
QC value within limits for Co	Recovery = 106.16%							
Crt	76830.5	1.02	mg/L	0.009	1.02	mg/L	0.009	0.84%
QC value within limits for Cr	Recovery = 102.31%							
Cut	378035.3	1.02	mg/L	0.004	1.02	mg/L	0.004	0.44%
QC value within limits for Cu	Recovery = 102.00%							
Fet	4282.0	0.998	mg/L	0.0142	0.998	mg/L	0.0142	1.42%
QC value within limits for Fe	Recovery = 99.83%							
Kt	13331.1	9.72	mg/L	0.169	9.72	mg/L	0.169	1.74%
QC value within limits for K	Recovery = 97.24%							
Mgt	10788.8	1.08	mg/L	0.010	1.08	mg/L	0.010	0.91%
QC value within limits for Mg	Recovery = 107.53%							
Mnt	575471.8	1.06	mg/L	0.000	1.06	mg/L	0.000	0.05%
QC value within limits for Mn	Recovery = 106.43%							
Mot	13187.5	0.993	mg/L	0.0115	0.993	mg/L	0.0115	1.16%
QC value within limits for Mo	Recovery = 99.26%							
Nat	3797.2	1.01	mg/L	0.006	1.01	mg/L	0.006	0.63%
QC value within limits for Na	Recovery = 100.80%							
Nit	23250.2	1.09	mg/L	0.009	1.09	mg/L	0.009	0.81%
QC value within limits for Ni	Recovery = 108.62%							
Pbt	4926.1	1.09	mg/L	0.012	1.09	mg/L	0.012	1.13%
QC value within limits for Pb	Recovery = 108.75%							
Sbt	2087.2	0.971	mg/L	0.0100	0.971	mg/L	0.0100	1.03%
QC value within limits for Sb	Recovery = 97.10%							
Set	1264.9	0.965	mg/L	0.0102	0.965	mg/L	0.0102	1.06%
QC value within limits for Se	Recovery = 96.54%							
Tlt	3087.6	1.09	mg/L	0.005	1.09	mg/L	0.005	0.45%
QC value within limits for Tl	Recovery = 108.80%							
Vt	162557.3	0.998	mg/L	0.0070	0.998	mg/L	0.0070	0.70%
QC value within limits for V	Recovery = 99.79%							
Znt	48703.7	1.04	mg/L	0.011	1.04	mg/L	0.011	1.02%
QC value within limits for Zn	Recovery = 103.81%							
Alxt	93995.9	964	ug/L	6.1	0.964	mg/L	0.0061	0.64%
QC value within limits for Alx	Recovery = 96.39%							
Bext	2708528.9	984	ug/L	3.2	0.984	mg/L	0.0032	0.33%

QC value within limits for Bex Recovery = 98.38%
All analyte(s) passed QC.

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

Autosampler Location: 4
Date Collected: 1/10/2007 09:11:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	225.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	136542.9	30.1	%	19.57				65.12%
Yr	72101.2	19.9	%	18.67				93.70%
Saturated within auto integration window (code 4)								
Ag†	-107.2	-0.00040	mg/L	0.004881	-0.00040	mg/L	0.004881	>999.9%
QC value less than the lower limit for Ag Recovery = -0.04%								
Al†	660.1	0.140	mg/L	0.1673	0.140	mg/L	0.1673	119.75%
QC value less than the lower limit for Al Recovery = 2.79%								
As†	-7.5	-0.00358	mg/L	0.007673	-0.00358	mg/L	0.007673	214.12%
QC value less than the lower limit for As Recovery = -0.07%								
B_†	943.1	0.0317	mg/L	0.02418	0.0317	mg/L	0.02418	76.33%
QC value less than the lower limit for B_ Recovery = 1.27%								
Ba†	-56.6	-0.00079	mg/L	0.000674	-0.00079	mg/L	0.000674	85.55%
QC value less than the lower limit for Ba Recovery = -0.02%								
Be†	-2475.1	-0.00090	mg/L	0.000469	-0.00090	mg/L	0.000469	52.20%
QC value less than the lower limit for Be Recovery = -0.04%								
Ca†	6980.5	0.480	mg/L	0.5633	0.480	mg/L	0.5633	117.42%
QC value less than the lower limit for Ca Recovery = 0.96%								
Cd†	132.6	0.00505	mg/L	0.004415	0.00505	mg/L	0.004415	87.46%
QC value less than the lower limit for Cd Recovery = 0.20%								
Co†	-166.7	-0.00635	mg/L	0.005336	-0.00635	mg/L	0.005336	84.09%
QC value less than the lower limit for Co Recovery = -0.13%								
Cr†	298.3	0.00397	mg/L	0.005220	0.00397	mg/L	0.005220	131.43%
QC value less than the lower limit for Cr Recovery = 0.08%								
Cu†	3566.7	0.00961	mg/L	0.002594	0.00961	mg/L	0.002594	26.98%
QC value less than the lower limit for Cu Recovery = 0.19%								
Fe†	-100.5	-0.0234	mg/L	0.02364	-0.0234	mg/L	0.02364	100.99%
QC value less than the lower limit for Fe Recovery = -0.47%								
K†	1328.0	0.969	mg/L	1.0524	0.969	mg/L	1.0524	108.65%
QC value less than the lower limit for K Recovery = 1.94%								
Mg†	204.3	0.0203	mg/L	0.02660	0.0203	mg/L	0.02660	131.00%
QC value less than the lower limit for Mg Recovery = 0.04%								
Mn†	-88.2	-0.00014	mg/L	0.000205	-0.00014	mg/L	0.000205	146.65%
QC value less than the lower limit for Mn Recovery = -0.00%								
Mo†	49.1	0.00370	mg/L	0.003694	0.00370	mg/L	0.003694	99.95%
QC value less than the lower limit for Mo Recovery = 0.07%								
Na†	-5607.6	-1.49	mg/L	1.506	-1.49	mg/L	1.506	101.14%
QC value less than the lower limit for Na Recovery = -2.98%								
Ni†	-169.7	-0.00793	mg/L	0.008336	-0.00793	mg/L	0.008336	105.19%
QC value less than the lower limit for Ni Recovery = -0.16%								
Pb†	24.3	0.00537	mg/L	0.005164	0.00537	mg/L	0.005164	96.12%
QC value less than the lower limit for Pb Recovery = 0.11%								
Sb†	49.2	0.0233	mg/L	0.02707	0.0233	mg/L	0.02707	116.30%
QC value less than the lower limit for Sb Recovery = 0.47%								
Se†	2.0	0.00147	mg/L	0.005889	0.00147	mg/L	0.005889	400.59%
QC value less than the lower limit for Se Recovery = 0.03%								
Tl†	-43.0	-0.0153	mg/L	0.01701	-0.0153	mg/L	0.01701	111.16%
QC value less than the lower limit for Tl Recovery = -0.31%								
V†	218.5	0.00135	mg/L	0.000261	0.00135	mg/L	0.000261	19.28%
QC value less than the lower limit for V Recovery = 0.03%								
Zn†	275.8	0.00596	mg/L	0.005419	0.00596	mg/L	0.005419	90.85%
QC value less than the lower limit for Zn Recovery = 0.12%								
Alx†	686.9	7.04	ug/L	3.807	0.00704	mg/L	0.003807	54.05%
QC value less than the lower limit for Alx Recovery = 0.14%								
Bex†	-2475.1	-0.899	ug/L	0.4698	-0.00090	mg/L	0.000470	52.25%

QC value less than the lower limit for Bex Recovery = -0.04%
QC Failed. Retry.

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

Autosampler Location: 4
Date Collected: 1/10/2007 09:14:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	225.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	290755.3	64.0	%	58.85				91.96%
Yr	77609.3	21.4	%	19.89				92.76%
Saturated within auto integration window (code 4)								
Ag†	-371.3	-0.00138	mg/L	0.003120	-0.00138	mg/L	0.003120	226.31%
QC value less than the lower limit for Ag Recovery = -0.14%								
Al†	505.3	0.107	mg/L	0.0799	0.107	mg/L	0.0799	74.72%
QC value less than the lower limit for Al Recovery = 2.14%								
As†	5.0	0.00239	mg/L	0.003801	0.00239	mg/L	0.003801	159.07%
QC value less than the lower limit for As Recovery = 0.05%								
B_†	467.9	0.0157	mg/L	0.02027	0.0157	mg/L	0.02027	129.02%
QC value less than the lower limit for B_ Recovery = 0.63%								
Ba†	-27.2	-0.00038	mg/L	0.000562	-0.00038	mg/L	0.000562	148.53%
QC value less than the lower limit for Ba Recovery = -0.01%								
Be†	264.2	0.00010	mg/L	0.000772	0.00010	mg/L	0.000772	804.17%
QC value less than the lower limit for Be Recovery = 0.00%								
Ca†	4306.1	0.296	mg/L	0.3460	0.296	mg/L	0.3460	116.90%
QC value less than the lower limit for Ca Recovery = 0.59%								
Cd†	75.4	0.00281	mg/L	0.004176	0.00281	mg/L	0.004176	148.44%
QC value less than the lower limit for Cd Recovery = 0.11%								
Co†	-80.1	-0.00305	mg/L	0.004789	-0.00305	mg/L	0.004789	157.18%
QC value less than the lower limit for Co Recovery = -0.06%								
Cr†	63.0	0.00084	mg/L	0.004920	0.00084	mg/L	0.004920	586.07%
QC value less than the lower limit for Cr Recovery = 0.02%								
Cu†	1585.9	0.00427	mg/L	0.006209	0.00427	mg/L	0.006209	145.27%
QC value less than the lower limit for Cu Recovery = 0.09%								
Fe†	-67.9	-0.0158	mg/L	0.01646	-0.0158	mg/L	0.01646	104.00%
QC value less than the lower limit for Fe Recovery = -0.32%								
K†	690.1	0.503	mg/L	0.3896	0.503	mg/L	0.3896	77.40%
QC value less than the lower limit for K Recovery = 1.01%								
Mg†	138.5	0.0138	mg/L	0.01697	0.0138	mg/L	0.01697	123.27%
QC value less than the lower limit for Mg Recovery = 0.03%								
Mn†	-129.8	-0.00023	mg/L	0.000201	-0.00023	mg/L	0.000201	88.40%
QC value less than the lower limit for Mn Recovery = -0.00%								
Mo†	25.4	0.00191	mg/L	0.002994	0.00191	mg/L	0.002994	156.58%
QC value less than the lower limit for Mo Recovery = 0.04%								
Na†	-4949.8	-1.31	mg/L	1.182	-1.31	mg/L	1.182	89.95%
QC value less than the lower limit for Na Recovery = -2.63%								
Ni†	-66.5	-0.00311	mg/L	0.005343	-0.00311	mg/L	0.005343	172.06%
QC value less than the lower limit for Ni Recovery = -0.06%								
Pb†	15.3	0.00338	mg/L	0.000472	0.00338	mg/L	0.000472	13.98%
QC value less than the lower limit for Pb Recovery = 0.07%								
Sb†	34.2	0.0162	mg/L	0.02125	0.0162	mg/L	0.02125	130.99%
QC value less than the lower limit for Sb Recovery = 0.32%								
Se†	-2.3	-0.00180	mg/L	0.008682	-0.00180	mg/L	0.008682	481.16%
QC value less than the lower limit for Se Recovery = -0.04%								
Tl†	-10.9	-0.00394	mg/L	0.006002	-0.00394	mg/L	0.006002	152.39%
QC value less than the lower limit for Tl Recovery = -0.08%								
V†	67.2	0.00041	mg/L	0.000900	0.00041	mg/L	0.000900	217.10%
QC value less than the lower limit for V Recovery = 0.01%								
Zn†	148.8	0.00321	mg/L	0.005216	0.00321	mg/L	0.005216	162.40%
QC value less than the lower limit for Zn Recovery = 0.06%								
Alx†	171.9	1.76	ug/L	3.878	0.00176	mg/L	0.003878	220.01%

QC value less than the lower limit for Alx Recovery = 0.04%

Bex†	264.2	0.0959 ug/L	0.77314	0.00010 mg/L	0.000773	805.78%

QC value less than the lower limit for Bex Recovery = 0.00%

QC Failed. Continue with analysis.

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

Autosampler Location: 0
Date Collected: 1/10/2007 09:18:25
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	225.0 kPa	0.65 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	459675.1	101	%	0.2				0.18%
Yr	368883.1	102	%	2.0				1.93%
Ag†	3.5	0.00001	mg/L	0.000009	0.00001	mg/L	0.000009	71.61%
QC value within limits for Ag	Recovery = Not calculated							
Al†	-7.8	-0.00173	mg/L	0.005664	-0.00173	mg/L	0.005664	327.08%
QC value within limits for Al	Recovery = Not calculated							
As†	0.4	0.00020	mg/L	0.000320	0.00020	mg/L	0.000320	156.59%
QC value within limits for As	Recovery = Not calculated							
B_†	234.2	0.00786	mg/L	0.000543	0.00786	mg/L	0.000543	6.91%
QC value within limits for B_	Recovery = Not calculated							
Ba†	-2.2	-0.00003	mg/L	0.000014	-0.00003	mg/L	0.000014	44.55%
QC value within limits for Ba	Recovery = Not calculated							
Be†	146.7	0.00005	mg/L	0.000015	0.00005	mg/L	0.000015	27.91%
QC value within limits for Be	Recovery = Not calculated							
Ca†	6.1	0.00042	mg/L	0.000511	0.00042	mg/L	0.000511	122.22%
QC value within limits for Ca	Recovery = Not calculated							
Cd†	2.0	0.00007	mg/L	0.000161	0.00007	mg/L	0.000161	226.61%
QC value within limits for Cd	Recovery = Not calculated							
Co†	-1.9	-0.00007	mg/L	0.000155	-0.00007	mg/L	0.000155	219.44%
QC value within limits for Co	Recovery = Not calculated							
Cr†	-12.4	-0.00016	mg/L	0.000005	-0.00016	mg/L	0.000005	3.11%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	78.6	0.00021	mg/L	0.000024	0.00021	mg/L	0.000024	11.50%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	-3.2	-0.00075	mg/L	0.001019	-0.00075	mg/L	0.001019	135.50%
QC value within limits for Fe	Recovery = Not calculated							
K†	22.9	0.0167	mg/L	0.02821	0.0167	mg/L	0.02821	168.92%
QC value within limits for K	Recovery = Not calculated							
Mg†	1.4	0.00014	mg/L	0.000077	0.00014	mg/L	0.000077	55.36%
QC value within limits for Mg	Recovery = Not calculated							
Mn†	-51.9	-0.00010	mg/L	0.000008	-0.00010	mg/L	0.000008	7.98%
QC value within limits for Mn	Recovery = Not calculated							
Mo†	22.4	0.00169	mg/L	0.000083	0.00169	mg/L	0.000083	4.94%
QC value within limits for Mo	Recovery = Not calculated							
Na†	-63.8	-0.0169	mg/L	0.00448	-0.0169	mg/L	0.00448	26.45%
QC value within limits for Na	Recovery = Not calculated							
Ni†	1.4	0.00007	mg/L	0.000133	0.00007	mg/L	0.000133	198.19%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	4.9	0.00108	mg/L	0.000196	0.00108	mg/L	0.000196	18.11%
QC value within limits for Pb	Recovery = Not calculated							
Sb†	-1.7	-0.00078	mg/L	0.001016	-0.00078	mg/L	0.001016	129.86%
QC value within limits for Sb	Recovery = Not calculated							
Se†	4.4	0.00333	mg/L	0.001094	0.00333	mg/L	0.001094	32.83%
QC value within limits for Se	Recovery = Not calculated							
Tl†	-2.0	-0.00072	mg/L	0.001530	-0.00072	mg/L	0.001530	212.30%
QC value within limits for Tl	Recovery = Not calculated							
V†	0.0	0.00000	mg/L	0.000112	0.00000	mg/L	0.000112	>999.9%
QC value within limits for V	Recovery = Not calculated							
Zn†	12.9	0.00028	mg/L	0.000096	0.00028	mg/L	0.000096	34.76%
QC value within limits for Zn	Recovery = Not calculated							
Alx†	34.9	0.358	ug/L	0.1379	0.00036	mg/L	0.000138	38.50%
QC value within limits for Alx	Recovery = Not calculated							
Bex†	146.7	0.0533	ug/L	0.01486	0.00005	mg/L	0.000015	27.90%
QC value within limits for Bex	Recovery = Not calculated							

All analyte(s) passed QC.

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

Autosampler Location: 20
Date Collected: 1/10/2007 09:21:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MRL

Analyte	Back Pressure	Flow
All	226.0 kPa	0.65 L/min

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	446238.7	98.2	%	1.03				1.05%
Yr	353824.7	97.8	%	0.12				0.12%
Ag†	2769.7	0.0103	mg/L	0.00028	0.0103	mg/L	0.00028	2.77%
QC value within limits for Ag	Recovery = 102.84%							
Al†	251.4	0.0523	mg/L	0.00212	0.0523	mg/L	0.00212	4.06%
QC value within limits for Al	Recovery = 104.69%							
As†	181.4	0.0863	mg/L	0.00178	0.0863	mg/L	0.00178	2.06%
QC value within limits for As	Recovery = 86.35%							
B_†	1617.0	0.0542	mg/L	0.00057	0.0542	mg/L	0.00057	1.05%
QC value within limits for B_	Recovery = 108.34%							
Ba†	1522.6	0.0212	mg/L	0.00028	0.0212	mg/L	0.00028	1.33%
QC value within limits for Ba	Recovery = 106.07%							
Be†	2926.7	0.00106	mg/L	0.000002	0.00106	mg/L	0.000002	0.20%
QC value within limits for Be	Recovery = 106.44%							
Ca†	15258.7	1.05	mg/L	0.001	1.05	mg/L	0.001	0.13%
QC value within limits for Ca	Recovery = 104.87%							
Cd†	162.7	0.00520	mg/L	0.000118	0.00520	mg/L	0.000118	2.27%
QC value within limits for Cd	Recovery = 104.00%							
Co†	1398.8	0.0532	mg/L	0.00077	0.0532	mg/L	0.00077	1.44%
QC value within limits for Co	Recovery = 106.46%							
Cr†	768.5	0.0102	mg/L	0.00028	0.0102	mg/L	0.00028	2.74%
QC value within limits for Cr	Recovery = 102.33%							
Cu†	3975.2	0.0108	mg/L	0.00003	0.0108	mg/L	0.00003	0.30%
QC value within limits for Cu	Recovery = 107.56%							
Fe†	90.0	0.0210	mg/L	0.00054	0.0210	mg/L	0.00054	2.59%
QC value within limits for Fe	Recovery = 104.98%							
K†	1375.1	1.00	mg/L	0.052	1.00	mg/L	0.052	5.23%
QC value within limits for K	Recovery = 100.30%							
Mg†	1095.4	0.109	mg/L	0.0003	0.109	mg/L	0.0003	0.31%
QC value within limits for Mg	Recovery = 109.08%							
Mn†	1143.2	0.00214	mg/L	0.000029	0.00214	mg/L	0.000029	1.34%
QC value within limits for Mn	Recovery = 106.91%							
Mo†	282.0	0.0212	mg/L	0.00037	0.0212	mg/L	0.00037	1.75%
QC value within limits for Mo	Recovery = 106.15%							
Na†	3733.2	0.991	mg/L	0.0108	0.991	mg/L	0.0108	1.09%
QC value within limits for Na	Recovery = 99.10%							
Ni†	475.0	0.0222	mg/L	0.00038	0.0222	mg/L	0.00038	1.70%
QC value within limits for Ni	Recovery = 110.82%							
Pb†	100.3	0.0222	mg/L	0.00089	0.0222	mg/L	0.00089	4.02%
QC value within limits for Pb	Recovery = 110.76%							
Sb†	83.1	0.0392	mg/L	0.00011	0.0392	mg/L	0.00011	0.29%
QC value within limits for Sb	Recovery = 78.43%							
Se†	134.7	0.103	mg/L	0.0041	0.103	mg/L	0.0041	4.01%
QC value within limits for Se	Recovery = 102.57%							
Tl†	324.0	0.113	mg/L	0.0014	0.113	mg/L	0.0014	1.25%
QC value within limits for Tl	Recovery = 113.42%							
V†	386.7	0.00242	mg/L	0.000052	0.00242	mg/L	0.000052	2.16%
QC value within limits for V	Recovery = 120.88%							
Zn†	1425.4	0.0304	mg/L	0.00034	0.0304	mg/L	0.00034	1.12%
QC value greater than the upper limit for Zn	Recovery = 152.20%							
Alx†	4909.3	50.3	ug/L	0.43	0.0503	mg/L	0.00043	0.86%
QC value within limits for Alx	Recovery = 100.69%							
Bex†	2926.7	1.06	ug/L	0.002	0.00106	mg/L	0.000002	0.19%
QC value within limits for Bex	Recovery = 106.30%							

QC Failed. Retry.

Sequence No.: 14
Sample ID: MRL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 20
Date Collected: 1/10/2007 09:24:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MRL

Analyte	Back Pressure	Flow
All	226.0 kPa	0.65 L/min

Mean Data: MRL

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	441902.6	97.3	%	0.52				0.53%
Yr	353759.9	97.8	%	0.01				0.01%
Ag†	2951.4	0.0110	mg/L	0.00009	0.0110	mg/L	0.00009	0.84%
QC value within limits for Ag	Recovery = 109.58%							
Al†	229.8	0.0478	mg/L	0.00238	0.0478	mg/L	0.00238	4.99%
QC value within limits for Al	Recovery = 95.59%							
As†	184.1	0.0877	mg/L	0.00297	0.0877	mg/L	0.00297	3.39%
QC value within limits for As	Recovery = 87.66%							
B_†	1628.0	0.0545	mg/L	0.00026	0.0545	mg/L	0.00026	0.47%
QC value within limits for B_	Recovery = 109.08%							
Ba†	1539.7	0.0215	mg/L	0.00006	0.0215	mg/L	0.00006	0.30%
QC value within limits for Ba	Recovery = 107.26%							
Be†	2973.4	0.00108	mg/L	0.000034	0.00108	mg/L	0.000034	3.10%
QC value within limits for Be	Recovery = 108.14%							
Ca†	15304.3	1.05	mg/L	0.009	1.05	mg/L	0.009	0.90%
QC value within limits for Ca	Recovery = 105.18%							
Cd†	165.3	0.00528	mg/L	0.000067	0.00528	mg/L	0.000067	1.28%
QC value within limits for Cd	Recovery = 105.63%							
Co†	1411.6	0.0537	mg/L	0.00022	0.0537	mg/L	0.00022	0.41%
QC value within limits for Co	Recovery = 107.43%							
Cr†	780.3	0.0104	mg/L	0.00027	0.0104	mg/L	0.00027	2.59%
QC value within limits for Cr	Recovery = 103.90%							
Cu†	3982.1	0.0108	mg/L	0.00014	0.0108	mg/L	0.00014	1.34%
QC value within limits for Cu	Recovery = 107.75%							
Fe†	88.1	0.0206	mg/L	0.00039	0.0206	mg/L	0.00039	1.88%
QC value within limits for Fe	Recovery = 102.77%							
K†	1363.2	0.994	mg/L	0.0394	0.994	mg/L	0.0394	3.96%
QC value within limits for K	Recovery = 99.43%							
Mg†	1091.9	0.109	mg/L	0.0001	0.109	mg/L	0.0001	0.05%
QC value within limits for Mg	Recovery = 108.73%							
Mn†	1173.2	0.00219	mg/L	0.000019	0.00219	mg/L	0.000019	0.89%
QC value within limits for Mn	Recovery = 109.67%							
Mo†	277.3	0.0209	mg/L	0.00011	0.0209	mg/L	0.00011	0.54%
QC value within limits for Mo	Recovery = 104.38%							
Na†	3800.9	1.01	mg/L	0.014	1.01	mg/L	0.014	1.39%
QC value within limits for Na	Recovery = 100.90%							
Ni†	481.4	0.0225	mg/L	0.00018	0.0225	mg/L	0.00018	0.78%
QC value within limits for Ni	Recovery = 112.30%							
Pb†	102.6	0.0227	mg/L	0.00027	0.0227	mg/L	0.00027	1.18%
QC value within limits for Pb	Recovery = 113.29%							
Sb†	95.8	0.0453	mg/L	0.00072	0.0453	mg/L	0.00072	1.59%
QC value within limits for Sb	Recovery = 90.50%							
Se†	136.0	0.104	mg/L	0.0002	0.104	mg/L	0.0002	0.19%
QC value within limits for Se	Recovery = 103.58%							
Tl†	327.9	0.115	mg/L	0.0012	0.115	mg/L	0.0012	1.04%
QC value within limits for Tl	Recovery = 114.78%							
V†	354.7	0.00222	mg/L	0.000370	0.00222	mg/L	0.000370	16.65%
QC value within limits for V	Recovery = 111.15%							
Zn†	1445.5	0.0309	mg/L	0.00005	0.0309	mg/L	0.00005	0.15%
QC value greater than the upper limit for Zn	Recovery = 154.34%							
Alx†	4930.1	50.6	ug/L	0.19	0.0506	mg/L	0.00019	0.37%
QC value within limits for Alx	Recovery = 101.12%							
Bex†	2973.4	1.08	ug/L	0.033	0.00108	mg/L	0.000033	3.10%

QC value within limits for Bex Recovery = 108.00%
QC Failed. Continue with analysis.

Sequence No.: 51
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/10/2007 11:47:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	418261.4	92.1	%	1.22				1.32%
Yr	342843.9	94.7	%	0.00				0.01%
Ag†	261872.2	0.972	mg/L	0.0041	0.972	mg/L	0.0041	0.42%
QC value within limits for Ag	Recovery = 97.23%							
Al†	25818.1	5.26	mg/L	0.002	5.26	mg/L	0.002	0.05%
QC value within limits for Al	Recovery = 105.12%							
As†	9475.2	4.53	mg/L	0.070	4.53	mg/L	0.070	1.54%
QC value within limits for As	Recovery = 90.54%							
B_†	73940.0	2.47	mg/L	0.017	2.47	mg/L	0.017	0.68%
QC value within limits for B_	Recovery = 98.86%							
Ba†	365403.3	5.09	mg/L	0.041	5.09	mg/L	0.041	0.81%
QC value within limits for Ba	Recovery = 101.87%							
Be†	5668941.2	2.06	mg/L	0.037	2.06	mg/L	0.037	1.81%
QC value within limits for Be	Recovery = 102.98%							
Ca†	726097.5	49.9	mg/L	0.16	49.9	mg/L	0.16	0.32%
QC value within limits for Ca	Recovery = 99.81%							
Cd†	66020.0	2.46	mg/L	0.017	2.46	mg/L	0.017	0.68%
QC value within limits for Cd	Recovery = 98.38%							
Co†	132292.5	5.03	mg/L	0.034	5.03	mg/L	0.034	0.67%
QC value within limits for Co	Recovery = 100.69%							
Cr†	375146.8	5.00	mg/L	0.022	5.00	mg/L	0.022	0.43%
QC value within limits for Cr	Recovery = 99.91%							
Cu†	1884986.2	5.09	mg/L	0.038	5.09	mg/L	0.038	0.74%
QC value within limits for Cu	Recovery = 101.72%							
Fe†	21093.5	4.92	mg/L	0.010	4.92	mg/L	0.010	0.21%
QC value within limits for Fe	Recovery = 98.36%							
K†	68666.8	50.1	mg/L	0.01	50.1	mg/L	0.01	0.03%
QC value within limits for K	Recovery = 100.17%							
Mg†	508236.8	50.6	mg/L	0.17	50.6	mg/L	0.17	0.35%
QC value within limits for Mg	Recovery = 101.21%							
Mn†	2769882.1	5.12	mg/L	0.033	5.12	mg/L	0.033	0.65%
QC value within limits for Mn	Recovery = 102.46%							
Mo†	66155.8	4.98	mg/L	0.039	4.98	mg/L	0.039	0.78%
QC value within limits for Mo	Recovery = 99.59%							
Na†	186187.7	49.4	mg/L	0.16	49.4	mg/L	0.16	0.32%
QC value within limits for Na	Recovery = 98.85%							
Ni†	110187.7	5.15	mg/L	0.019	5.15	mg/L	0.019	0.37%
QC value within limits for Ni	Recovery = 102.96%							
Pb†	22823.1	5.04	mg/L	0.068	5.04	mg/L	0.068	1.35%
QC value within limits for Pb	Recovery = 100.77%							
Sb†	10151.3	4.72	mg/L	0.066	4.72	mg/L	0.066	1.40%
QC value within limits for Sb	Recovery = 94.45%							
Se†	6490.3	4.95	mg/L	0.077	4.95	mg/L	0.077	1.56%
QC value within limits for Se	Recovery = 99.06%							
Tl†	14618.8	5.14	mg/L	0.079	5.14	mg/L	0.079	1.55%
QC value within limits for Tl	Recovery = 102.71%							
V†	823936.2	5.06	mg/L	0.024	5.06	mg/L	0.024	0.48%
QC value within limits for V	Recovery = 101.14%							
Zn†	238791.6	5.09	mg/L	0.026	5.09	mg/L	0.026	0.50%
QC value within limits for Zn	Recovery = 101.82%							
Alx†	473332.6	4850	ug/L	30.5	4.85	mg/L	0.031	0.63%
QC value within limits for Alx	Recovery = 97.08%							
Bex†	5668941.2	2060	ug/L	37.2	2.06	mg/L	0.037	1.81%
QC value within limits for Bex	Recovery = 102.95%							

All analyte(s) passed QC.

Sequence No.: 52
Sample ID: CCB
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 0
Date Collected: 1/10/2007 11:51:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	443040.8	97.5	%	1.45				1.48%
Yr	358466.1	99.1	%	0.15				0.15%
Ag†	-0.2	0.00000	mg/L	0.000166	0.00000	mg/L	0.000166	>999.9%
QC value within limits for Ag		Recovery = Not calculated						
Al†	7.6	0.00143	mg/L	0.002049	0.00143	mg/L	0.002049	142.93%
QC value within limits for Al		Recovery = Not calculated						
As†	20.6	0.00981	mg/L	0.002008	0.00981	mg/L	0.002008	20.47%
QC value within limits for As		Recovery = Not calculated						
B_†	414.2	0.0139	mg/L	0.00152	0.0139	mg/L	0.00152	10.94%
QC value within limits for B_		Recovery = Not calculated						
Ba†	-4.7	-0.00007	mg/L	0.000018	-0.00007	mg/L	0.000018	27.31%
QC value within limits for Ba		Recovery = Not calculated						
Be†	95.9	0.00003	mg/L	0.000033	0.00003	mg/L	0.000033	96.00%
QC value within limits for Be		Recovery = Not calculated						
Ca†	23.8	0.00164	mg/L	0.000079	0.00164	mg/L	0.000079	4.81%
QC value within limits for Ca		Recovery = Not calculated						
Cd†	10.8	0.00028	mg/L	0.000205	0.00028	mg/L	0.000205	73.73%
QC value within limits for Cd		Recovery = Not calculated						
Co†	2.4	0.00009	mg/L	0.000187	0.00009	mg/L	0.000187	203.79%
QC value within limits for Co		Recovery = Not calculated						
Cr†	-26.9	-0.00036	mg/L	0.000183	-0.00036	mg/L	0.000183	51.25%
QC value within limits for Cr		Recovery = Not calculated						
Cu†	175.7	0.00047	mg/L	0.000084	0.00047	mg/L	0.000084	17.83%
QC value within limits for Cu		Recovery = Not calculated						
Fe†	0.6	0.00015	mg/L	0.000259	0.00015	mg/L	0.000259	170.41%
QC value within limits for Fe		Recovery = Not calculated						
K†	82.0	0.0598	mg/L	0.01887	0.0598	mg/L	0.01887	31.53%
QC value within limits for K		Recovery = Not calculated						
Mg†	0.7	0.00007	mg/L	0.000090	0.00007	mg/L	0.000090	124.99%
QC value within limits for Mg		Recovery = Not calculated						
Mn†	-34.5	-0.00006	mg/L	0.000004	-0.00006	mg/L	0.000004	6.99%
QC value within limits for Mn		Recovery = Not calculated						
Mo†	54.6	0.00411	mg/L	0.000674	0.00411	mg/L	0.000674	16.39%
QC value within limits for Mo		Recovery = Not calculated						
Na†	-31.0	-0.00824	mg/L	0.002574	-0.00824	mg/L	0.002574	31.23%
QC value within limits for Na		Recovery = Not calculated						
Ni†	6.3	0.00030	mg/L	0.000247	0.00030	mg/L	0.000247	83.52%
QC value within limits for Ni		Recovery = Not calculated						
Pb†	1.3	0.00029	mg/L	0.000654	0.00029	mg/L	0.000654	225.81%
QC value within limits for Pb		Recovery = Not calculated						
Sb†	7.3	0.00347	mg/L	0.001805	0.00347	mg/L	0.001805	52.01%
QC value within limits for Sb		Recovery = Not calculated						
Se†	3.5	0.00263	mg/L	0.000513	0.00263	mg/L	0.000513	19.48%
QC value within limits for Se		Recovery = Not calculated						
Tl†	7.0	0.00246	mg/L	0.000304	0.00246	mg/L	0.000304	12.34%
QC value within limits for Tl		Recovery = Not calculated						
V†	63.5	0.00039	mg/L	0.000229	0.00039	mg/L	0.000229	59.07%
QC value within limits for V		Recovery = Not calculated						
Zn†	17.5	0.00037	mg/L	0.000023	0.00037	mg/L	0.000023	6.17%
QC value within limits for Zn		Recovery = Not calculated						
Alx†	102.2	1.05	ug/L	0.767	0.00105	mg/L	0.000767	73.16%
QC value within limits for Alx		Recovery = Not calculated						
Bex†	95.9	0.0348	ug/L	0.03342	0.00003	mg/L	0.000033	95.92%
QC value within limits for Bex		Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 53
Sample ID: MBLANK
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 65
Date Collected: 1/10/2007 11:55:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MBLANK

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: MBLANK

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	440607.1	97.0	%	0.70				0.72%
Yr	361654.9	99.9	%	0.07				0.07%
Ag†	62.0	0.00023	mg/L	0.000183	0.00023	mg/L	0.000183	79.44%
Al†	-38.5	-0.00820	mg/L	0.012359	-0.00820	mg/L	0.012359	150.75%
As†	8.6	0.00412	mg/L	0.001201	0.00412	mg/L	0.001201	29.19%
B_†	183.7	0.00617	mg/L	0.000290	0.00617	mg/L	0.000290	4.71%
Ba†	-10.3	-0.00014	mg/L	0.000039	-0.00014	mg/L	0.000039	27.32%
Be†	108.6	0.00004	mg/L	0.000025	0.00004	mg/L	0.000025	64.69%
Ca†	37.8	0.00260	mg/L	0.002607	0.00260	mg/L	0.002607	100.41%
Cd†	8.0	0.00025	mg/L	0.000172	0.00025	mg/L	0.000172	69.16%
Co†	2.9	0.00011	mg/L	0.000293	0.00011	mg/L	0.000293	261.74%
Cr†	-30.5	-0.00041	mg/L	0.000043	-0.00041	mg/L	0.000043	10.66%
Cu†	146.9	0.00040	mg/L	0.000140	0.00040	mg/L	0.000140	35.38%
Fe†	-1.8	-0.00043	mg/L	0.000294	-0.00043	mg/L	0.000294	68.88%
K†	93.6	0.0683	mg/L	0.05009	0.0683	mg/L	0.05009	73.36%
Mg†	5.6	0.00056	mg/L	0.001221	0.00056	mg/L	0.001221	217.93%
Mn†	-47.7	-0.00009	mg/L	0.000002	-0.00009	mg/L	0.000002	2.59%
Mo†	16.2	0.00122	mg/L	0.000115	0.00122	mg/L	0.000115	9.44%
Na†	-79.6	-0.0211	mg/L	0.01838	-0.0211	mg/L	0.01838	86.93%
Ni†	16.8	0.00079	mg/L	0.000360	0.00079	mg/L	0.000360	45.80%
Pb†	1.9	0.00041	mg/L	0.000884	0.00041	mg/L	0.000884	213.36%
Sb†	2.0	0.00096	mg/L	0.001763	0.00096	mg/L	0.001763	182.84%
Se†	1.1	0.00084	mg/L	0.007086	0.00084	mg/L	0.007086	840.88%
Tl†	4.8	0.00168	mg/L	0.000545	0.00168	mg/L	0.000545	32.45%
V†	52.8	0.00032	mg/L	0.000359	0.00032	mg/L	0.000359	111.74%
Zn†	9.6	0.00020	mg/L	0.000096	0.00020	mg/L	0.000096	47.84%
Alx†	84.1	0.862	ug/L	0.4726	0.00086	mg/L	0.000473	54.82%
Bex†	108.6	0.0394	ug/L	0.02546	0.00004	mg/L	0.000025	64.55%

Sequence No.: 54
Sample ID: LCS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 66
Date Collected: 1/10/2007 11:59:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LCS

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: LCS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	417703.5	91.9	%	0.02				0.02%
Yr	344896.5	95.3	%	1.15				1.20%
Agt	135753.1	0.504	mg/L	0.0002	0.504	mg/L	0.0002	0.04%
Alt	10084.4	2.09	mg/L	0.006	2.09	mg/L	0.006	0.29%
Ast	2065.0	0.986	mg/L	0.0004	0.986	mg/L	0.0004	0.04%
B_t	14800.4	0.495	mg/L	0.0002	0.495	mg/L	0.0002	0.04%
Bat	74090.3	1.03	mg/L	0.001	1.03	mg/L	0.001	0.09%
Bet	146104.3	0.0532	mg/L	0.00007	0.0532	mg/L	0.00007	0.12%
Cat	752016.4	51.7	mg/L	0.67	51.7	mg/L	0.67	1.30%
Cdt	5546.9	0.201	mg/L	0.0002	0.201	mg/L	0.0002	0.08%
Cot	27350.9	1.04	mg/L	0.002	1.04	mg/L	0.002	0.19%
Crt	76240.4	1.02	mg/L	0.001	1.02	mg/L	0.001	0.06%
Cut	388801.2	1.05	mg/L	0.003	1.05	mg/L	0.003	0.27%
Fet	21168.5	4.93	mg/L	0.004	4.93	mg/L	0.004	0.08%
Kt	28116.2	20.5	mg/L	0.01	20.5	mg/L	0.01	0.06%
Mgt	207825.7	20.7	mg/L	0.06	20.7	mg/L	0.06	0.27%
Mnt	285973.7	0.529	mg/L	0.0005	0.529	mg/L	0.0005	0.10%
Mot	13658.3	1.03	mg/L	0.001	1.03	mg/L	0.001	0.07%
Nat	190092.2	50.5	mg/L	0.16	50.5	mg/L	0.16	0.32%
Nit	11391.3	0.532	mg/L	0.0007	0.532	mg/L	0.0007	0.13%
Pbt	4773.2	1.05	mg/L	0.000	1.05	mg/L	0.000	0.01%
Sbt	1019.1	0.464	mg/L	0.0011	0.464	mg/L	0.0011	0.24%
Set	1302.8	1.00	mg/L	0.001	1.00	mg/L	0.001	0.06%
Tlt	3093.5	1.07	mg/L	0.000	1.07	mg/L	0.000	0.03%
Vt	167758.8	1.03	mg/L	0.002	1.03	mg/L	0.002	0.19%
Znt	54584.1	1.17	mg/L	0.004	1.17	mg/L	0.004	0.32%
Alxt	187558.7	1920	ug/L	12.1	1.92	mg/L	0.012	0.63%
Bext	146104.3	53.1	ug/L	0.07	0.0531	mg/L	0.00007	0.12%

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

Autosampler Location: 67
Date Collected: 1/10/2007 12:02:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LCSD

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: LCSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	426696.2	93.9	%	0.64				0.68%
Yr	349373.2	96.5	%	0.28				0.29%
Agt	136093.1	0.505	mg/L	0.0011	0.505	mg/L	0.0011	0.22%
Alt	10208.2	2.12	mg/L	0.012	2.12	mg/L	0.012	0.57%
Ast	2047.1	0.978	mg/L	0.0122	0.978	mg/L	0.0122	1.24%
B_t	15034.7	0.503	mg/L	0.0008	0.503	mg/L	0.0008	0.16%
Bat	74231.5	1.03	mg/L	0.001	1.03	mg/L	0.001	0.07%
Bet	146604.3	0.0534	mg/L	0.00006	0.0534	mg/L	0.00006	0.10%
Cat	749516.4	51.5	mg/L	0.75	51.5	mg/L	0.75	1.47%
Cdt	5488.1	0.199	mg/L	0.0020	0.199	mg/L	0.0020	1.03%
Cot	27418.3	1.04	mg/L	0.001	1.04	mg/L	0.001	0.06%
Crt	76393.7	1.02	mg/L	0.000	1.02	mg/L	0.000	0.01%
Cut	390834.0	1.05	mg/L	0.002	1.05	mg/L	0.002	0.22%
Fet	21291.1	4.96	mg/L	0.002	4.96	mg/L	0.002	0.04%
Kt	28336.7	20.7	mg/L	0.18	20.7	mg/L	0.18	0.87%
Mgt	208709.7	20.8	mg/L	0.00	20.8	mg/L	0.00	0.01%
Mnt	286840.4	0.531	mg/L	0.0005	0.531	mg/L	0.0005	0.09%
Mot	13546.0	1.02	mg/L	0.012	1.02	mg/L	0.012	1.21%
Nat	191787.1	50.9	mg/L	0.05	50.9	mg/L	0.05	0.10%
Nit	11259.5	0.526	mg/L	0.0048	0.526	mg/L	0.0048	0.91%
Pbt	4733.5	1.04	mg/L	0.009	1.04	mg/L	0.009	0.90%
Sbt	1009.6	0.459	mg/L	0.0051	0.459	mg/L	0.0051	1.12%
Set	1292.5	0.996	mg/L	0.0091	0.996	mg/L	0.0091	0.92%
Tlt	3072.7	1.06	mg/L	0.010	1.06	mg/L	0.010	0.97%
Vt	168274.1	1.03	mg/L	0.000	1.03	mg/L	0.000	0.03%
Znt	54616.1	1.17	mg/L	0.001	1.17	mg/L	0.001	0.08%
Alxt	188945.7	1940	ug/L	9.9	1.94	mg/L	0.010	0.51%
Bext	146604.3	53.2	ug/L	0.06	0.0532	mg/L	0.00006	0.11%

Sequence No.: 56
Sample ID: 2701090548
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 68
Date Collected: 1/10/2007 12:06:41
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2701090548

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: 2701090548

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	424431.8	93.4	%	0.74				0.80%
Yr	351780.1	97.2	%	0.24				0.25%
Agt	33.6	0.00012	mg/L	0.000081	0.00012	mg/L	0.000081	65.26%
Alt	48.4	0.0101	mg/L	0.00300	0.0101	mg/L	0.00300	29.71%
Ast	-25.6	-0.0122	mg/L	0.00138	-0.0122	mg/L	0.00138	11.31%
B_t	2026.1	0.0680	mg/L	0.00082	0.0680	mg/L	0.00082	1.21%
Bat	3779.3	0.0527	mg/L	0.00044	0.0527	mg/L	0.00044	0.84%
Bet	-412.3	-0.00015	mg/L	0.000020	-0.00015	mg/L	0.000020	13.28%
Cat	1287474.9	88.5	mg/L	0.20	88.5	mg/L	0.20	0.23%
Cdt	-16.5	-0.00046	mg/L	0.000127	-0.00046	mg/L	0.000127	27.72%
Cot	-2.0	-0.00007	mg/L	0.000132	-0.00007	mg/L	0.000132	175.77%
Crt	-37.3	-0.00050	mg/L	0.000052	-0.00050	mg/L	0.000052	10.45%
Cut	2580.0	0.00696	mg/L	0.000121	0.00696	mg/L	0.000121	1.73%
Fet	102.3	0.0238	mg/L	0.00077	0.0238	mg/L	0.00077	3.24%
Kt	4996.4	3.64	mg/L	0.073	3.64	mg/L	0.073	2.00%
Mgt	183809.3	18.3	mg/L	0.10	18.3	mg/L	0.10	0.54%
Mnt	339.2	0.00072	mg/L	0.000027	0.00072	mg/L	0.000027	3.77%
Mot	48.1	0.00362	mg/L	0.000202	0.00362	mg/L	0.000202	5.59%
Nat	93276.2	24.8	mg/L	0.20	24.8	mg/L	0.20	0.81%
Nit	5.9	0.00027	mg/L	0.000091	0.00027	mg/L	0.000091	34.07%
Pbt	-13.9	-0.00307	mg/L	0.000190	-0.00307	mg/L	0.000190	6.20%
Sbt	10.7	0.00507	mg/L	0.001152	0.00507	mg/L	0.001152	22.71%
Set	-41.0	-0.0312	mg/L	0.00605	-0.0312	mg/L	0.00605	19.41%
Tlt	61.9	-0.0102	mg/L	0.00070	-0.0102	mg/L	0.00070	6.85%
Vt	528.7	0.00323	mg/L	0.000041	0.00323	mg/L	0.000041	1.27%
Znt	1349.0	0.0289	mg/L	0.00010	0.0289	mg/L	0.00010	0.34%
Alxt	1070.4	11.0	ug/L	0.99	0.0110	mg/L	0.00099	8.97%
Bext	-412.3	-0.150	ug/L	0.0199	-0.00015	mg/L	0.000020	13.29%

Sequence No.: 57
Sample ID: 2701090548MS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 69
Date Collected: 1/10/2007 12:11:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2701090548MS

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: 2701090548MS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	417813.4	92.0	%	0.09				0.10%
Yr	347039.4	95.9	%	0.37				0.39%
Agt	120291.6	0.447	mg/L	0.0105	0.447	mg/L	0.0105	2.36%
Alt	10537.3	2.19	mg/L	0.002	2.19	mg/L	0.002	0.08%
Ast	2139.5	1.02	mg/L	0.005	1.02	mg/L	0.005	0.51%
B_t	17567.5	0.588	mg/L	0.0009	0.588	mg/L	0.0009	0.15%
Bat	78957.6	1.10	mg/L	0.001	1.10	mg/L	0.001	0.07%
Bet	147131.4	0.0536	mg/L	0.00018	0.0536	mg/L	0.00018	0.34%
Cat	1977414.9	136	mg/L	0.6	136	mg/L	0.6	0.41%
Cdt	5722.4	0.207	mg/L	0.0005	0.207	mg/L	0.0005	0.26%
Cot	26865.1	1.02	mg/L	0.001	1.02	mg/L	0.001	0.05%
Crt	76904.5	1.02	mg/L	0.006	1.02	mg/L	0.006	0.56%
Cut	386733.0	1.04	mg/L	0.001	1.04	mg/L	0.001	0.07%
Fet	21731.9	5.06	mg/L	0.000	5.06	mg/L	0.000	0.01%
Kt	34089.9	24.9	mg/L	0.10	24.9	mg/L	0.10	0.39%
Mgt	386181.0	38.5	mg/L	0.04	38.5	mg/L	0.04	0.10%
Mnt	291007.5	0.539	mg/L	0.0003	0.539	mg/L	0.0003	0.06%
Mot	13247.7	0.997	mg/L	0.0087	0.997	mg/L	0.0087	0.87%
Nat	285276.7	75.7	mg/L	0.08	75.7	mg/L	0.08	0.10%
Nit	10957.3	0.512	mg/L	0.0001	0.512	mg/L	0.0001	0.01%
Pbt	4781.7	1.06	mg/L	0.002	1.06	mg/L	0.002	0.14%
Sbt	934.8	0.424	mg/L	0.0176	0.424	mg/L	0.0176	4.16%
Set	1347.1	1.04	mg/L	0.004	1.04	mg/L	0.004	0.37%
Tlt	3104.7	1.04	mg/L	0.004	1.04	mg/L	0.004	0.34%
Vt	170722.8	1.05	mg/L	0.004	1.05	mg/L	0.004	0.37%
Znt	53482.3	1.14	mg/L	0.000	1.14	mg/L	0.000	0.02%
Alxt	196536.0	2020	ug/L	5.3	2.02	mg/L	0.005	0.26%
Bext	147131.4	53.4	ug/L	0.18	0.0534	mg/L	0.00018	0.34%

Sequence No.: 58
Sample ID: 2701090548MSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 70
Date Collected: 1/10/2007 12:14:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2701090548MSD

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: 2701090548MSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	424140.0	93.4	%	2.99				3.20%
Yr	363801.6	101	%	1.1				1.13%
Agt	121930.3	0.453	mg/L	0.0094	0.453	mg/L	0.0094	2.09%
Alt	10340.8	2.15	mg/L	0.025	2.15	mg/L	0.025	1.17%
Ast	2096.9	1.00	mg/L	0.029	1.00	mg/L	0.029	2.88%
B_t	17475.7	0.585	mg/L	0.0032	0.585	mg/L	0.0032	0.55%
Bat	78438.3	1.09	mg/L	0.004	1.09	mg/L	0.004	0.38%
Bet	146490.2	0.0533	mg/L	0.00007	0.0533	mg/L	0.00007	0.12%
Cat	1935506.3	133	mg/L	2.4	133	mg/L	2.4	1.83%
Cdt	5615.2	0.203	mg/L	0.0063	0.203	mg/L	0.0063	3.09%
Cot	26299.3	1.00	mg/L	0.029	1.00	mg/L	0.029	2.88%
Crt	76320.1	1.02	mg/L	0.001	1.02	mg/L	0.001	0.06%
Cut	384891.4	1.04	mg/L	0.001	1.04	mg/L	0.001	0.06%
Fet	21502.7	5.01	mg/L	0.005	5.01	mg/L	0.005	0.10%
Kt	33334.2	24.3	mg/L	0.13	24.3	mg/L	0.13	0.54%
Mgt	381427.4	38.0	mg/L	0.10	38.0	mg/L	0.10	0.26%
Mnt	288931.0	0.535	mg/L	0.0002	0.535	mg/L	0.0002	0.03%
Mot	13057.6	0.983	mg/L	0.0340	0.983	mg/L	0.0340	3.46%
Nat	278462.5	73.9	mg/L	1.41	73.9	mg/L	1.41	1.90%
Nit	10741.5	0.502	mg/L	0.0146	0.502	mg/L	0.0146	2.90%
Pbt	4692.2	1.04	mg/L	0.028	1.04	mg/L	0.028	2.71%
Sbt	927.5	0.420	mg/L	0.0328	0.420	mg/L	0.0328	7.81%
Set	1329.2	1.02	mg/L	0.034	1.02	mg/L	0.034	3.28%
Tlt	3044.6	1.02	mg/L	0.029	1.02	mg/L	0.029	2.86%
Vt	169348.4	1.04	mg/L	0.000	1.04	mg/L	0.000	0.02%
Znt	53104.3	1.14	mg/L	0.001	1.14	mg/L	0.001	0.13%
Alxt	195584.4	2010	ug/L	11.8	2.01	mg/L	0.012	0.59%
Bext	146490.2	53.2	ug/L	0.07	0.0532	mg/L	0.00007	0.12%

Sequence No.: 63
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/10/2007 12:36:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	407616.0	89.7	%	0.30				0.33%
Yr	337726.9	93.3	%	0.36				0.38%
Ag†	264546.2	0.982	mg/L	0.0014	0.982	mg/L	0.0014	0.14%
QC value within limits for Ag	Recovery = 98.22%							
Al†	26172.4	5.33	mg/L	0.045	5.33	mg/L	0.045	0.85%
QC value within limits for Al	Recovery = 106.61%							
As†	9513.6	4.55	mg/L	0.032	4.55	mg/L	0.032	0.70%
QC value within limits for As	Recovery = 90.91%							
B_†	74675.6	2.50	mg/L	0.017	2.50	mg/L	0.017	0.66%
QC value within limits for B_	Recovery = 99.85%							
Ba†	367055.4	5.12	mg/L	0.015	5.12	mg/L	0.015	0.28%
QC value within limits for Ba	Recovery = 102.33%							
Be†	5711379.2	2.08	mg/L	0.004	2.08	mg/L	0.004	0.19%
QC value within limits for Be	Recovery = 103.75%							
Ca†	732435.0	50.3	mg/L	0.62	50.3	mg/L	0.62	1.23%
QC value within limits for Ca	Recovery = 100.68%							
Cd†	66454.2	2.48	mg/L	0.003	2.48	mg/L	0.003	0.13%
QC value within limits for Cd	Recovery = 99.03%							
Co†	132499.1	5.04	mg/L	0.011	5.04	mg/L	0.011	0.22%
QC value within limits for Co	Recovery = 100.84%							
Cr†	376575.9	5.01	mg/L	0.014	5.01	mg/L	0.014	0.27%
QC value within limits for Cr	Recovery = 100.29%							
Cu†	1918511.9	5.18	mg/L	0.003	5.18	mg/L	0.003	0.05%
QC value within limits for Cu	Recovery = 103.53%							
Fe†	21222.0	4.95	mg/L	0.004	4.95	mg/L	0.004	0.08%
QC value within limits for Fe	Recovery = 98.96%							
K†	70196.1	51.2	mg/L	0.09	51.2	mg/L	0.09	0.17%
QC value within limits for K	Recovery = 102.40%							
Mg†	513641.0	51.1	mg/L	0.00	51.1	mg/L	0.00	0.00%
QC value within limits for Mg	Recovery = 102.29%							
Mn†	2780686.3	5.14	mg/L	0.012	5.14	mg/L	0.012	0.24%
QC value within limits for Mn	Recovery = 102.86%							
Mo†	66316.9	4.99	mg/L	0.016	4.99	mg/L	0.016	0.32%
QC value within limits for Mo	Recovery = 99.84%							
Na†	190330.5	50.5	mg/L	0.03	50.5	mg/L	0.03	0.05%
QC value within limits for Na	Recovery = 101.05%							
Ni†	110208.3	5.15	mg/L	0.023	5.15	mg/L	0.023	0.45%
QC value within limits for Ni	Recovery = 102.97%							
Pb†	22870.7	5.05	mg/L	0.029	5.05	mg/L	0.029	0.57%
QC value within limits for Pb	Recovery = 100.98%							
Sb†	10238.5	4.76	mg/L	0.034	4.76	mg/L	0.034	0.72%
QC value within limits for Sb	Recovery = 95.27%							
Se†	6528.6	4.98	mg/L	0.029	4.98	mg/L	0.029	0.58%
QC value within limits for Se	Recovery = 99.64%							
Tl†	14709.6	5.17	mg/L	0.039	5.17	mg/L	0.039	0.76%
QC value within limits for Tl	Recovery = 103.35%							
V†	827975.1	5.08	mg/L	0.012	5.08	mg/L	0.012	0.23%
QC value within limits for V	Recovery = 101.63%							
Zn†	239700.9	5.11	mg/L	0.014	5.11	mg/L	0.014	0.27%
QC value within limits for Zn	Recovery = 102.21%							
Alx†	499676.0	5120	ug/L	21.5	5.12	mg/L	0.021	0.42%
QC value within limits for Alx	Recovery = 102.48%							
Bex†	5711379.2	2070	ug/L	3.9	2.07	mg/L	0.004	0.19%
QC value within limits for Bex	Recovery = 103.72%							

All analyte(s) passed QC.

Sequence No.: 64 **Autosampler Location: 0**
Sample ID: CCB **Date Collected: 1/10/2007 12:40:08**
Analyst: Walter Hsieh **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: 1X **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	228.0 kPa	0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	432109.5	95.1	%	0.37				0.38%
Yr	355449.9	98.2	%	0.06				0.06%
Ag†	57.2	0.00021	mg/L	0.000504	0.00021	mg/L	0.000504	237.53%
QC value within limits for Ag		Recovery = Not calculated						
Al†	1.9	0.00024	mg/L	0.001456	0.00024	mg/L	0.001456	614.16%
QC value within limits for Al		Recovery = Not calculated						
As†	22.1	0.0105	mg/L	0.00224	0.0105	mg/L	0.00224	21.27%
QC value within limits for As		Recovery = Not calculated						
B_†	538.0	0.0181	mg/L	0.00180	0.0181	mg/L	0.00180	9.99%
QC value within limits for B_		Recovery = Not calculated						
Ba†	-2.5	-0.00003	mg/L	0.000015	-0.00003	mg/L	0.000015	42.71%
QC value within limits for Ba		Recovery = Not calculated						
Be†	-246.5	-0.00009	mg/L	0.000028	-0.00009	mg/L	0.000028	31.45%
QC value within limits for Be		Recovery = Not calculated						
Ca†	24.1	0.00165	mg/L	0.000382	0.00165	mg/L	0.000382	23.08%
QC value within limits for Ca		Recovery = Not calculated						
Cd†	11.4	0.00029	mg/L	0.000068	0.00029	mg/L	0.000068	23.67%
QC value within limits for Cd		Recovery = Not calculated						
Co†	2.6	0.00010	mg/L	0.000091	0.00010	mg/L	0.000091	92.06%
QC value within limits for Co		Recovery = Not calculated						
Cr†	-14.8	-0.00020	mg/L	0.000019	-0.00020	mg/L	0.000019	9.76%
QC value within limits for Cr		Recovery = Not calculated						
Cu†	317.9	0.00086	mg/L	0.000085	0.00086	mg/L	0.000085	9.97%
QC value within limits for Cu		Recovery = Not calculated						
Fe†	1.7	0.00040	mg/L	0.000452	0.00040	mg/L	0.000452	114.04%
QC value within limits for Fe		Recovery = Not calculated						
K†	126.2	0.0921	mg/L	0.03013	0.0921	mg/L	0.03013	32.72%
QC value within limits for K		Recovery = Not calculated						
Mg†	0.7	0.00007	mg/L	0.000106	0.00007	mg/L	0.000106	150.62%
QC value within limits for Mg		Recovery = Not calculated						
Mn†	-45.1	-0.00008	mg/L	0.000014	-0.00008	mg/L	0.000014	17.41%
QC value within limits for Mn		Recovery = Not calculated						
Mo†	52.5	0.00395	mg/L	0.000765	0.00395	mg/L	0.000765	19.35%
QC value within limits for Mo		Recovery = Not calculated						
Na†	-9.5	-0.00251	mg/L	0.012903	-0.00251	mg/L	0.012903	513.25%
QC value within limits for Na		Recovery = Not calculated						
Ni†	6.8	0.00032	mg/L	0.000061	0.00032	mg/L	0.000061	19.25%
QC value within limits for Ni		Recovery = Not calculated						
Pb†	1.3	0.00028	mg/L	0.001304	0.00028	mg/L	0.001304	472.08%
QC value within limits for Pb		Recovery = Not calculated						
Sb†	5.8	0.00274	mg/L	0.000200	0.00274	mg/L	0.000200	7.32%
QC value within limits for Sb		Recovery = Not calculated						
Se†	7.0	0.00535	mg/L	0.002641	0.00535	mg/L	0.002641	49.40%
QC value within limits for Se		Recovery = Not calculated						
Tl†	7.8	0.00274	mg/L	0.002624	0.00274	mg/L	0.002624	95.71%
QC value within limits for Tl		Recovery = Not calculated						
V†	8.8	0.00005	mg/L	0.000091	0.00005	mg/L	0.000091	168.80%
QC value within limits for V		Recovery = Not calculated						
Zn†	13.7	0.00029	mg/L	0.000003	0.00029	mg/L	0.000003	1.07%
QC value within limits for Zn		Recovery = Not calculated						
Alx†	24.9	0.256	ug/L	0.3197	0.00026	mg/L	0.000320	125.08%
QC value within limits for Alx		Recovery = Not calculated						
Bex†	-246.5	-0.0895	ug/L	0.02817	-0.00009	mg/L	0.000028	31.47%
QC value within limits for Bex		Recovery = Not calculated						

All analyte(s) passed QC.

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

Autosampler Location: 5
Date Collected: 1/10/2007 12:43:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: MCV

Analyte	Back Pressure	Flow
All	229.0 kPa	0.65 L/min

Mean Data: MCV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	421807.6	92.8	%	0.88				0.95%
Yr	345634.6	95.5	%	0.10				0.11%
Ag†	131145.9	0.487	mg/L	0.0012	0.487	mg/L	0.0012	0.24%
QC value within limits for Ag	Recovery = 97.39%							
Al†	12968.8	2.64	mg/L	0.011	2.64	mg/L	0.011	0.40%
QC value within limits for Al	Recovery = 105.63%							
As†	4752.7	2.27	mg/L	0.020	2.27	mg/L	0.020	0.89%
QC value within limits for As	Recovery = 90.83%							
B_†	36966.1	1.24	mg/L	0.003	1.24	mg/L	0.003	0.24%
QC value within limits for B_	Recovery = 98.85%							
Ba†	183924.9	2.56	mg/L	0.018	2.56	mg/L	0.018	0.69%
QC value within limits for Ba	Recovery = 102.55%							
Be†	2828969.9	1.03	mg/L	0.002	1.03	mg/L	0.002	0.21%
QC value within limits for Be	Recovery = 102.78%							
Ca†	363006.5	24.9	mg/L	0.12	24.9	mg/L	0.12	0.49%
QC value within limits for Ca	Recovery = 99.79%							
Cd†	32980.7	1.23	mg/L	0.013	1.23	mg/L	0.013	1.05%
QC value within limits for Cd	Recovery = 98.30%							
Co†	66726.6	2.54	mg/L	0.017	2.54	mg/L	0.017	0.66%
QC value within limits for Co	Recovery = 101.57%							
Cr†	186930.4	2.49	mg/L	0.005	2.49	mg/L	0.005	0.19%
QC value within limits for Cr	Recovery = 99.57%							
Cu†	958680.4	2.59	mg/L	0.010	2.59	mg/L	0.010	0.39%
QC value within limits for Cu	Recovery = 103.47%							
Fe†	10603.6	2.47	mg/L	0.022	2.47	mg/L	0.022	0.89%
QC value within limits for Fe	Recovery = 98.89%							
K†	34355.0	25.1	mg/L	0.17	25.1	mg/L	0.17	0.66%
QC value within limits for K	Recovery = 100.23%							
Mg†	254860.6	25.4	mg/L	0.15	25.4	mg/L	0.15	0.60%
QC value within limits for Mg	Recovery = 101.50%							
Mn†	1402137.4	2.59	mg/L	0.014	2.59	mg/L	0.014	0.53%
QC value within limits for Mn	Recovery = 103.73%							
Mo†	33098.7	2.49	mg/L	0.027	2.49	mg/L	0.027	1.06%
QC value within limits for Mo	Recovery = 99.66%							
Na†	93931.7	24.9	mg/L	0.26	24.9	mg/L	0.26	1.05%
QC value within limits for Na	Recovery = 99.74%							
Ni†	55805.2	2.61	mg/L	0.011	2.61	mg/L	0.011	0.44%
QC value within limits for Ni	Recovery = 104.28%							
Pb†	11596.6	2.56	mg/L	0.022	2.56	mg/L	0.022	0.86%
QC value within limits for Pb	Recovery = 102.40%							
Sb†	5080.7	2.36	mg/L	0.020	2.36	mg/L	0.020	0.85%
QC value within limits for Sb	Recovery = 94.55%							
Se†	3239.3	2.47	mg/L	0.024	2.47	mg/L	0.024	0.96%
QC value within limits for Se	Recovery = 98.88%							
Tl†	7494.5	2.63	mg/L	0.026	2.63	mg/L	0.026	0.97%
QC value within limits for Tl	Recovery = 105.32%							
V†	411321.5	2.52	mg/L	0.004	2.52	mg/L	0.004	0.14%
QC value within limits for V	Recovery = 100.98%							
Zn†	120252.8	2.56	mg/L	0.009	2.56	mg/L	0.009	0.35%
QC value within limits for Zn	Recovery = 102.54%							
Alx†	245841.7	2520	ug/L	11.1	2.52	mg/L	0.011	0.44%
QC value within limits for Alx	Recovery = 100.84%							
Bex†	2828969.9	1030	ug/L	2.2	1.03	mg/L	0.002	0.21%
QC value within limits for Bex	Recovery = 102.75%							

All analyte(s) passed QC.

Sequence No.: 71
Sample ID: 2701090266
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 80
Date Collected: 1/10/2007 13:09:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2701090266

Analyte	Back Pressure	Flow
All	231.0 kPa	0.65 L/min

Mean Data: 2701090266

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	445516.3	98.1	%	0.44				0.45%
Yr	356442.3	98.5	%	1:31				1.33%
Agt	-57.7	-0.00021	mg/L	0.000213	-0.00021	mg/L	0.000213	99.59%
Alt	38.5	0.00813	mg/L	0.002305	0.00813	mg/L	0.002305	28.37%
Ast	1.9	0.00091	mg/L	0.001594	0.00091	mg/L	0.001594	175.58%
B_t	122.5	0.00411	mg/L	0.000293	0.00411	mg/L	0.000293	7.13%
Bat	176.0	0.00245	mg/L	0.000030	0.00245	mg/L	0.000030	1.22%
Bet	24.1	0.00001	mg/L	0.000022	0.00001	mg/L	0.000022	258.45%
Cat	44928.4	3.09	mg/L	0.001	3.09	mg/L	0.001	0.04%
Cdt	0.0	-0.00001	mg/L	0.000056	-0.00001	mg/L	0.000056	573.94%
Cot	6.2	0.00023	mg/L	0.000039	0.00023	mg/L	0.000039	16.39%
Crt	-90.0	-0.00120	mg/L	0.000059	-0.00120	mg/L	0.000059	4.93%
Cut	941.2	0.00254	mg/L	0.000022	0.00254	mg/L	0.000022	0.85%
Fet	42.7	0.00995	mg/L	0.000025	0.00995	mg/L	0.000025	0.25%
Kt	504.1	0.368	mg/L	0.0329	0.368	mg/L	0.0329	8.95%
Mgt	5911.2	0.589	mg/L	0.0046	0.589	mg/L	0.0046	0.79%
Mnt	3048.3	0.00565	mg/L	0.000027	0.00565	mg/L	0.000027	0.49%
Mot	6.4	0.00048	mg/L	0.000295	0.00048	mg/L	0.000295	60.97%
Nat	18304.8	4.86	mg/L	0.023	4.86	mg/L	0.023	0.46%
Nit	12.8	0.00060	mg/L	0.000096	0.00060	mg/L	0.000096	16.07%
Pbt	-7.2	-0.00158	mg/L	0.000397	-0.00158	mg/L	0.000397	25.08%
Sbt	-5.1	-0.00241	mg/L	0.000052	-0.00241	mg/L	0.000052	2.18%
Set	-4.5	-0.00340	mg/L	0.002787	-0.00340	mg/L	0.002787	81.86%
Tlt	10.3	0.00252	mg/L	0.000818	0.00252	mg/L	0.000818	32.49%
Vt	96.9	0.00059	mg/L	0.000129	0.00059	mg/L	0.000129	22.05%
Znt	64.1	0.00137	mg/L	0.000017	0.00137	mg/L	0.000017	1.28%
Alxt	1176.4	12.1	ug/L	1.04	0.0121	mg/L	0.00104	8.59%
Bext	24.1	0.00874	ug/L	0.022135	0.00001	mg/L	0.000022	253.17%

Sequence No.: 72
Sample ID: 2701090266MS
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 81
Date Collected: 1/10/2007 13:13:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2701090266MS

Analyte	Back Pressure	Flow
All	231.0 kPa	0.65 L/min

Mean Data: 2701090266MS

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	422001.5	92.9	%	1.43				1.54%
Yr	345428.4	95.4	%	0.10				0.10%
Agt	120791.7	0.448	mg/L	0.0228	0.448	mg/L	0.0228	5.08%
Alt	10449.8	2.17	mg/L	0.030	2.17	mg/L	0.030	1.39%
Ast	2101.9	1.00	mg/L	0.018	1.00	mg/L	0.018	1.84%
B_t	15265.5	0.510	mg/L	0.0011	0.510	mg/L	0.0011	0.21%
Bat	75759.5	1.06	mg/L	0.003	1.06	mg/L	0.003	0.29%
Bet	146890.4	0.0535	mg/L	0.00004	0.0535	mg/L	0.00004	0.08%
Cat	805617.0	55.4	mg/L	0.50	55.4	mg/L	0.50	0.90%
Cdt	5711.6	0.207	mg/L	0.0034	0.207	mg/L	0.0034	1.64%
Cot	28000.3	1.07	mg/L	0.004	1.07	mg/L	0.004	0.35%
Crt	77239.9	1.03	mg/L	0.001	1.03	mg/L	0.001	0.13%
Cut	380674.2	1.03	mg/L	0.005	1.03	mg/L	0.005	0.50%
Fet	21644.3	5.04	mg/L	0.020	5.04	mg/L	0.020	0.40%
Kt	29241.0	21.3	mg/L	0.09	21.3	mg/L	0.09	0.41%
Mgt	219815.6	21.9	mg/L	0.02	21.9	mg/L	0.02	0.10%
Mnt	292317.9	0.541	mg/L	0.0014	0.541	mg/L	0.0014	0.26%
Mot	13389.6	1.01	mg/L	0.025	1.01	mg/L	0.025	2.46%
Nat	212891.4	56.5	mg/L	0.18	56.5	mg/L	0.18	0.32%
Nit	11499.7	0.537	mg/L	0.0086	0.537	mg/L	0.0086	1.60%
Pbt	4889.6	1.08	mg/L	0.016	1.08	mg/L	0.016	1.48%
Sbt	966.4	0.438	mg/L	0.0233	0.438	mg/L	0.0233	5.31%
Set	1356.6	1.04	mg/L	0.019	1.04	mg/L	0.019	1.83%
Tlt	3151.8	1.09	mg/L	0.016	1.09	mg/L	0.016	1.47%
Vt	169977.7	1.04	mg/L	0.000	1.04	mg/L	0.000	0.01%
Znt	52773.0	1.13	mg/L	0.006	1.13	mg/L	0.006	0.52%
Alxt	194481.6	1990	ug/L	17.7	1.99	mg/L	0.018	0.89%
Bext	146890.4	53.4	ug/L	0.04	0.0534	mg/L	0.00004	0.08%

Sequence No.: 73
Sample ID: 2701090266MSD
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 82
Date Collected: 1/10/2007 13:16:47
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2701090266MSD

Analyte	Back Pressure	Flow
All	231.0 kPa	0.65 L/min

Mean Data: 2701090266MSD

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	424965.4	93.5	%	0.36				0.38%
Yr	348607.5	96.3	%	0.97				1.01%
Agt	112226.5	0.417	mg/L	0.0329	0.417	mg/L	0.0329	7.89%
Alt	10392.4	2.16	mg/L	0.005	2.16	mg/L	0.005	0.23%
Ast	2081.9	0.994	mg/L	0.0053	0.994	mg/L	0.0053	0.53%
B_t	15177.4	0.507	mg/L	0.0001	0.507	mg/L	0.0001	0.01%
Bat	75261.4	1.05	mg/L	0.000	1.05	mg/L	0.000	0.01%
Bet	146026.3	0.0532	mg/L	0.00007	0.0532	mg/L	0.00007	0.13%
Cat	788101.0	54.2	mg/L	0.40	54.2	mg/L	0.40	0.74%
Cdt	5674.8	0.206	mg/L	0.0013	0.206	mg/L	0.0013	0.61%
Cot	27705.8	1.05	mg/L	0.003	1.05	mg/L	0.003	0.26%
Crt	76618.8	1.02	mg/L	0.001	1.02	mg/L	0.001	0.10%
Cut	378434.1	1.02	mg/L	0.002	1.02	mg/L	0.002	0.17%
Fet	21494.0	5.01	mg/L	0.001	5.01	mg/L	0.001	0.01%
Kt	29107.0	21.2	mg/L	0.05	21.2	mg/L	0.05	0.21%
Mgt	217535.3	21.7	mg/L	0.03	21.7	mg/L	0.03	0.12%
Mnt	289758.5	0.536	mg/L	0.0003	0.536	mg/L	0.0003	0.05%
Mot	13374.0	1.01	mg/L	0.012	1.01	mg/L	0.012	1.15%
Nat	210211.1	55.8	mg/L	0.02	55.8	mg/L	0.02	0.03%
Nit	11415.5	0.533	mg/L	0.0023	0.533	mg/L	0.0023	0.44%
Pbt	4843.3	1.07	mg/L	0.004	1.07	mg/L	0.004	0.41%
Sbt	971.1	0.441	mg/L	0.0138	0.441	mg/L	0.0138	3.14%
Set	1341.1	1.03	mg/L	0.003	1.03	mg/L	0.003	0.28%
Tlt	3134.0	1.08	mg/L	0.006	1.08	mg/L	0.006	0.52%
Vt	168946.5	1.04	mg/L	0.001	1.04	mg/L	0.001	0.07%
Znt	52305.0	1.12	mg/L	0.002	1.12	mg/L	0.002	0.15%
Alxt	192890.7	1980	ug/L	3.6	1.98	mg/L	0.004	0.18%
Bext	146026.3	53.0	ug/L	0.07	0.0530	mg/L	0.00007	0.13%

Sequence No.: 76
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 1/10/2007 13:29:23
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	231.0 kPa	0.65 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	407525.6	89.7	%	0.83				0.93%
Yr	335164.3	92.6	%	0.41				0.44%
Agt	265970.2	0.988	mg/L	0.0050	0.988	mg/L	0.0050	0.50%
QC value within limits for Ag	Recovery = 98.75%							
Alt	26253.3	5.34	mg/L	0.063	5.34	mg/L	0.063	1.18%
QC value within limits for Al	Recovery = 106.89%							
Ast	9818.0	4.69	mg/L	0.075	4.69	mg/L	0.075	1.61%
QC value within limits for As	Recovery = 93.81%							
B_t	75361.3	2.52	mg/L	0.026	2.52	mg/L	0.026	1.02%
QC value within limits for B_	Recovery = 100.76%							
Bat	373105.4	5.20	mg/L	0.022	5.20	mg/L	0.022	0.42%
QC value within limits for Ba	Recovery = 104.01%							
Bet	5814310.3	2.11	mg/L	0.015	2.11	mg/L	0.015	0.70%
QC value within limits for Be	Recovery = 105.62%							
Cat	747227.9	51.4	mg/L	0.32	51.4	mg/L	0.32	0.63%
QC value within limits for Ca	Recovery = 102.71%							
Cdt	67355.3	2.51	mg/L	0.004	2.51	mg/L	0.004	0.16%
QC value within limits for Cd	Recovery = 100.34%							
Cot	135333.3	5.15	mg/L	0.015	5.15	mg/L	0.015	0.30%
QC value within limits for Co	Recovery = 103.00%							
Crt	382799.8	5.10	mg/L	0.030	5.10	mg/L	0.030	0.59%
QC value within limits for Cr	Recovery = 101.95%							
Cut	1913822.5	5.16	mg/L	0.028	5.16	mg/L	0.028	0.55%
QC value within limits for Cu	Recovery = 103.28%							
Fet	21587.3	5.03	mg/L	0.026	5.03	mg/L	0.026	0.51%
QC value within limits for Fe	Recovery = 100.66%							
Kt	70513.9	51.4	mg/L	0.47	51.4	mg/L	0.47	0.91%
QC value within limits for K	Recovery = 102.86%							
Mgt	520760.4	51.9	mg/L	0.10	51.9	mg/L	0.10	0.18%
QC value within limits for Mg	Recovery = 103.70%							
Mnt	2827223.5	5.23	mg/L	0.025	5.23	mg/L	0.025	0.47%
QC value within limits for Mn	Recovery = 104.58%							
Mot	67367.4	5.07	mg/L	0.028	5.07	mg/L	0.028	0.56%
QC value within limits for Mo	Recovery = 101.42%							
Nat	190789.7	50.6	mg/L	0.15	50.6	mg/L	0.15	0.30%
QC value within limits for Na	Recovery = 101.30%							
Nit	112569.2	5.26	mg/L	0.026	5.26	mg/L	0.026	0.49%
QC value within limits for Ni	Recovery = 105.18%							
Pbt	23559.8	5.20	mg/L	0.071	5.20	mg/L	0.071	1.37%
QC value within limits for Pb	Recovery = 104.02%							
Sbt	10460.1	4.87	mg/L	0.071	4.87	mg/L	0.071	1.46%
QC value within limits for Sb	Recovery = 97.34%							
Set	6701.0	5.11	mg/L	0.068	5.11	mg/L	0.068	1.32%
QC value within limits for Se	Recovery = 102.27%							
Tlt	15051.9	5.29	mg/L	0.059	5.29	mg/L	0.059	1.11%
QC value within limits for Tl	Recovery = 105.75%							
Vt	839267.9	5.15	mg/L	0.034	5.15	mg/L	0.034	0.66%
QC value within limits for V	Recovery = 103.02%							
Znt	243940.1	5.20	mg/L	0.029	5.20	mg/L	0.029	0.56%
QC value within limits for Zn	Recovery = 104.01%							
Alxt	486279.6	4990	ug/L	17.7	4.99	mg/L	0.018	0.35%
QC value within limits for Alx	Recovery = 99.73%							
Bext	5814310.3	2110	ug/L	14.9	2.11	mg/L	0.015	0.70%
QC value within limits for Bex	Recovery = 105.59%							

All analyte(s) passed QC.

Sequence No.: 77
Sample ID: CCB
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 0
Date Collected: 1/10/2007 13:33:16
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	230.0 kPa	0.65 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
Sca	430338.8	94.7	%	0.18				0.19%
Yr	350017.9	96.7	%	0.64				0.66%
Ag†	-3.0	-0.00001	mg/L	0.000148	-0.00001	mg/L	0.000148	>999.9%
QC value within limits for Ag	Recovery = Not calculated							
Al†	32.2	0.00664	mg/L	0.008823	0.00664	mg/L	0.008823	132.83%
QC value within limits for Al	Recovery = Not calculated							
As†	17.2	0.00819	mg/L	0.002389	0.00819	mg/L	0.002389	29.16%
QC value within limits for As	Recovery = Not calculated							
B_†	384.3	0.0129	mg/L	0.00101	0.0129	mg/L	0.00101	7.82%
QC value within limits for B_	Recovery = Not calculated							
Ba†	-7.9	-0.00011	mg/L	0.000027	-0.00011	mg/L	0.000027	24.52%
QC value within limits for Ba	Recovery = Not calculated							
Be†	19.5	0.00001	mg/L	0.000004	0.00001	mg/L	0.000004	50.71%
QC value within limits for Be	Recovery = Not calculated							
Ca†	48.9	0.00336	mg/L	0.000300	0.00336	mg/L	0.000300	8.92%
QC value within limits for Ca	Recovery = Not calculated							
Cd†	11.8	0.00034	mg/L	0.000020	0.00034	mg/L	0.000020	5.98%
QC value within limits for Cd	Recovery = Not calculated							
Co†	1.9	0.00007	mg/L	0.000129	0.00007	mg/L	0.000129	178.22%
QC value within limits for Co	Recovery = Not calculated							
Cr†	-21.7	-0.00029	mg/L	0.000062	-0.00029	mg/L	0.000062	21.40%
QC value within limits for Cr	Recovery = Not calculated							
Cu†	145.4	0.00039	mg/L	0.000342	0.00039	mg/L	0.000342	87.46%
QC value within limits for Cu	Recovery = Not calculated							
Fe†	4.7	0.00111	mg/L	0.000308	0.00111	mg/L	0.000308	27.75%
QC value within limits for Fe	Recovery = Not calculated							
K†	89.2	0.0651	mg/L	0.01944	0.0651	mg/L	0.01944	29.88%
QC value within limits for K	Recovery = Not calculated							
Mg†	-0.5	-0.00004	mg/L	0.001075	-0.00004	mg/L	0.001075	>999.9%
QC value within limits for Mg	Recovery = Not calculated							
Mn†	-68.3	-0.00012	mg/L	0.000005	-0.00012	mg/L	0.000005	3.91%
QC value within limits for Mn	Recovery = Not calculated							
Mo†	56.5	0.00426	mg/L	0.000281	0.00426	mg/L	0.000281	6.60%
QC value within limits for Mo	Recovery = Not calculated							
Na†	-98.4	-0.0261	mg/L	0.00279	-0.0261	mg/L	0.00279	10.67%
QC value within limits for Na	Recovery = Not calculated							
Ni†	7.9	0.00037	mg/L	0.000362	0.00037	mg/L	0.000362	98.25%
QC value within limits for Ni	Recovery = Not calculated							
Pb†	3.4	0.00076	mg/L	0.001874	0.00076	mg/L	0.001874	247.24%
QC value within limits for Pb	Recovery = Not calculated							
Sb†	4.7	0.00226	mg/L	0.000681	0.00226	mg/L	0.000681	30.20%
QC value within limits for Sb	Recovery = Not calculated							
Se†	3.2	0.00246	mg/L	0.002110	0.00246	mg/L	0.002110	85.65%
QC value within limits for Se	Recovery = Not calculated							
Tl†	1.6	0.00054	mg/L	0.000755	0.00054	mg/L	0.000755	138.90%
QC value within limits for Tl	Recovery = Not calculated							
V†	49.0	0.00030	mg/L	0.000136	0.00030	mg/L	0.000136	45.28%
QC value within limits for V	Recovery = Not calculated							
Zn†	11.5	0.00024	mg/L	0.000113	0.00024	mg/L	0.000113	46.36%
QC value within limits for Zn	Recovery = Not calculated							
Alx†	63.3	0.650	ug/L	0.2231	0.00065	mg/L	0.000223	34.34%
QC value within limits for Alx	Recovery = Not calculated							
Bex†	19.5	0.00708	ug/L	0.003577	0.00001	mg/L	0.000004	50.54%
QC value within limits for Bex	Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 81
Sample ID: 2701090304_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 88
Date Collected: 1/10/2007 13:48:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2701090304_2X

Analyte	Back Pressure	Flow
All	231.0 kPa	0.65 L/min

Mean Data: 2701090304_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sca	381685.0	84.0	%	0.23				0.27%
Yr	327755.8	90.6	%	0.79				0.87%
Agt	-78.0	-0.00029	mg/L	0.000097	-0.00058	mg/L	0.000195	33.57%
Alt	36.4	0.00534	mg/L	0.009313	0.0107	mg/L	0.01863	174.51%
Ast	-4.5	-0.00206	mg/L	0.000368	-0.00412	mg/L	0.000736	17.86%
B_t	61829.4	2.08	mg/L	0.005	4.15	mg/L	0.010	0.25%
Bat	857.5	0.0120	mg/L	0.00001	0.0239	mg/L	0.00002	0.08%
Bet	-1186.6	-0.00043	mg/L	0.000036	-0.00086	mg/L	0.000071	8.33%
Cat	3278369.5	225	mg/L	0.9	451	mg/L	1.9	0.41%
Cdt	-15.5	-0.00055	mg/L	0.000066	-0.00110	mg/L	0.000133	12.08%
Cot	52.1	0.00198	mg/L	0.000126	0.00397	mg/L	0.000252	6.36%
Crt	1202.0	0.0160	mg/L	0.00005	0.0320	mg/L	0.00009	0.29%
Cut	783.9	0.00209	mg/L	0.000073	0.00419	mg/L	0.000146	3.48%
Fet	261.6	0.0610	mg/L	0.00068	0.122	mg/L	0.0014	1.11%
Kt	21332.4	15.6	mg/L	0.20	31.1	mg/L	0.41	1.31%
Mgt	1075429.8	107	mg/L	0.5	214	mg/L	0.9	0.42%
Mnt	253688.1	0.469	mg/L	0.0003	0.939	mg/L	0.0006	0.07%
Mot	733.6	0.0552	mg/L	0.00001	0.110	mg/L	0.0000	0.03%
Nat	2559155.7	679	mg/L	0.5	1360	mg/L	0.9	0.07%
Nit	118.5	0.00553	mg/L	0.000040	0.0111	mg/L	0.00008	0.73%
Pbt	-53.5	-0.0118	mg/L	0.00244	-0.0236	mg/L	0.00487	20.62%
Sbt	14.9	0.00676	mg/L	0.000845	0.0135	mg/L	0.00169	12.50%
Set	-99.9	-0.0759	mg/L	0.00743	-0.152	mg/L	0.0149	9.79%
Tlt	55.6	-0.0599	mg/L	0.00370	-0.120	mg/L	0.0074	6.17%
Vt	4016.9	0.0246	mg/L	0.00015	0.0493	mg/L	0.00030	0.60%
Znt	2600.7	0.0558	mg/L	0.00027	0.112	mg/L	0.0005	0.48%
Alxt	621.8	6.38	ug/L	0.542	0.0128	mg/L	0.00108	8.50%
Bext	-1186.6	-0.431	ug/L	0.0358	-0.00086	mg/L	0.000072	8.30%

Sequence No.: 82
Sample ID: 2701090303_2X
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 2X

Autosampler Location: 89
Date Collected: 1/10/2007 13:53:00
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: 2701090303_2X

Analyte	Back Pressure	Flow
All	233.0 kPa	0.65 L/min

Mean Data: 2701090303_2X

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	383506.8	84.4	%	0.59				0.70%
Yr	330373.1	91.3	%	0.63				0.69%
Agt	-111.4	-0.00041	mg/L	0.000219	-0.00083	mg/L	0.000437	52.83%
Alt	45.2	0.00447	mg/L	0.000375	0.00895	mg/L	0.000750	8.38%
Ast	-55.6	-0.0264	mg/L	0.00127	-0.0528	mg/L	0.00253	4.79%
B_t	62300.5	2.09	mg/L	0.010	4.18	mg/L	0.021	0.50%
Bat	862.2	0.0120	mg/L	0.00023	0.0240	mg/L	0.00046	1.91%
Bet	-1154.8	-0.00042	mg/L	0.000039	-0.00084	mg/L	0.000078	9.29%
Cat	3301015.6	227	mg/L	1.2	454	mg/L	2.3	0.51%
Cdt	-25.7	-0.00058	mg/L	0.000325	-0.00116	mg/L	0.000650	55.87%
Cot	192.7	0.00733	mg/L	0.000299	0.0147	mg/L	0.00060	4.07%
Crt	35.9	0.00048	mg/L	0.000129	0.00096	mg/L	0.000259	27.10%
Cut	417.6	0.00108	mg/L	0.000264	0.00217	mg/L	0.000528	24.36%
Fet	851.3	0.199	mg/L	0.0031	0.397	mg/L	0.0062	1.56%
Kt	21007.4	15.3	mg/L	0.08	30.6	mg/L	0.17	0.54%
Mgt	1079818.6	108	mg/L	0.5	215	mg/L	1.1	0.50%
Mnt	268835.8	0.497	mg/L	0.0014	0.995	mg/L	0.0029	0.29%
Mot	1583.2	0.119	mg/L	0.0010	0.238	mg/L	0.0020	0.86%
Nat	2624182.7	697	mg/L	0.6	1390	mg/L	1.2	0.09%
Nit	342.7	0.0160	mg/L	0.00055	0.0320	mg/L	0.00109	3.42%
Pbt	-49.3	-0.0109	mg/L	0.00193	-0.0218	mg/L	0.00387	17.75%
Sbt	8.4	0.00399	mg/L	0.002937	0.00798	mg/L	0.005873	73.63%
Set	-104.7	-0.0793	mg/L	0.01054	-0.159	mg/L	0.0211	13.30%
Tlt	49.3	-0.0628	mg/L	0.00235	-0.126	mg/L	0.0047	3.75%
Vt	2499.8	0.0153	mg/L	0.00018	0.0306	mg/L	0.00036	1.19%
Znt	2926.1	0.0627	mg/L	0.00078	0.125	mg/L	0.0016	1.25%
Alxt	862.0	8.84	ug/L	0.972	0.0177	mg/L	0.00194	11.00%
Bext	-1154.8	-0.419	ug/L	0.0390	-0.00084	mg/L	0.000078	9.31%

Sequence No.: 85
Sample ID: WASH
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 0
Date Collected: 1/10/2007 14:06:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: WASH

Analyte	Back Pressure	Flow
All	234.0 kPa	0.65 L/min

Mean Data: WASH

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	437424.8	96.3	%	1.62				1.68%
Yr	356492.0	98.5	%	0.22				0.23%
Agt	42.4	0.00016	mg/L	0.000066	0.00016	mg/L	0.000066	41.66%
Alt	7.8	0.00163	mg/L	0.008363	0.00163	mg/L	0.008363	513.59%
Ast	-3.1	-0.00149	mg/L	0.000036	-0.00149	mg/L	0.000036	2.45%
B_t	636.2	0.0214	mg/L	0.00052	0.0214	mg/L	0.00052	2.44%
Bat	-5.1	-0.00007	mg/L	0.000001	-0.00007	mg/L	0.000001	1.59%
Bet	-16.9	-0.00001	mg/L	0.000006	-0.00001	mg/L	0.000006	94.26%
Cat	24.9	0.00171	mg/L	0.000017	0.00171	mg/L	0.000017	1.00%
Cdt	3.1	0.00014	mg/L	0.000014	0.00014	mg/L	0.000014	10.44%
Cot	1.8	0.00007	mg/L	0.000064	0.00007	mg/L	0.000064	93.18%
Crt	22.5	0.00030	mg/L	0.000090	0.00030	mg/L	0.000090	30.04%
Cut	69.8	0.00019	mg/L	0.000240	0.00019	mg/L	0.000240	127.68%
Fet	1.9	0.00044	mg/L	0.000360	0.00044	mg/L	0.000360	81.71%
Kt	79.4	0.0579	mg/L	0.01901	0.0579	mg/L	0.01901	32.83%
Mgt	9.2	0.00092	mg/L	0.000395	0.00092	mg/L	0.000395	43.08%
Mnt	-45.1	-0.00008	mg/L	0.000023	-0.00008	mg/L	0.000023	27.49%
Mot	10.7	0.00080	mg/L	0.000037	0.00080	mg/L	0.000037	4.67%
Nat	428.5	0.114	mg/L	0.0004	0.114	mg/L	0.0004	0.37%
Nit	4.5	0.00021	mg/L	0.000102	0.00021	mg/L	0.000102	47.98%
Pbt	0.8	0.00017	mg/L	0.000260	0.00017	mg/L	0.000260	153.44%
Sbt	-2.9	-0.00139	mg/L	0.000646	-0.00139	mg/L	0.000646	46.48%
Set	-0.3	-0.00023	mg/L	0.002333	-0.00023	mg/L	0.002333	>999.9%
Tlt	-7.3	-0.00257	mg/L	0.000551	-0.00257	mg/L	0.000551	21.47%
Vt	43.5	0.00027	mg/L	0.000140	0.00027	mg/L	0.000140	52.21%
Znt	3.9	0.00008	mg/L	0.000042	0.00008	mg/L	0.000042	50.50%
Alxt	68.7	0.705	ug/L	0.7669	0.00070	mg/L	0.000767	108.79%
Bext	-16.9	-0.00615	ug/L	0.005753	-0.00001	mg/L	0.000006	93.54%

Sequence No.: 86
Sample ID: WASH
Analyst: Walter Hsieh
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 0
Date Collected: 1/10/2007 14:09:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: WASH

Analyte	Back Pressure	Flow
All	234.0 kPa	0.65 L/min

Mean Data: WASH

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sca	437613.7	96.3	%	0.25				0.26%
Yr	354655.3	98.0	%	0.86				0.88%
Agt	65.6	0.00024	mg/L	0.000250	0.00024	mg/L	0.000250	102.48%
Alt	31.8	0.00671	mg/L	0.007864	0.00671	mg/L	0.007864	117.16%
Ast	0.1	0.00003	mg/L	0.000896	0.00003	mg/L	0.000896	>999.9%
B_t	482.1	0.0162	mg/L	0.00005	0.0162	mg/L	0.00005	0.29%
Bat	-6.8	-0.00009	mg/L	0.000033	-0.00009	mg/L	0.000033	34.86%
Bet	4.9	0.00000	mg/L	0.000017	0.00000	mg/L	0.000017	952.87%
Cat	41.5	0.00285	mg/L	0.001722	0.00285	mg/L	0.001722	60.40%

Cdt	4.4	0.00017 mg/L	0.000116	0.00017 mg/L	0.000116	69.89%
Cot	-0.0	0.00000 mg/L	0.000066	0.00000 mg/L	0.000066	>999.9%
Crt	23.4	0.00031 mg/L	0.000020	0.00031 mg/L	0.000020	6.38%
Cut	57.1	0.00015 mg/L	0.000082	0.00015 mg/L	0.000082	53.30%
Fet	-3.6	-0.00083 mg/L	0.000250	-0.00083 mg/L	0.000250	30.13%
Kt	101.6	0.0741 mg/L	0.00428	0.0741 mg/L	0.00428	5.78%
Mgt	6.9	0.00069 mg/L	0.000019	0.00069 mg/L	0.000019	2.82%
Mnt	-59.5	-0.00011 mg/L	0.000013	-0.00011 mg/L	0.000013	11.64%
Mot	8.6	0.00065 mg/L	0.000099	0.00065 mg/L	0.000099	15.39%
Nat	227.6	0.0604 mg/L	0.00526	0.0604 mg/L	0.00526	8.70%
Nit	5.8	0.00027 mg/L	0.000016	0.00027 mg/L	0.000016	5.91%
Pbt	-4.3	-0.00095 mg/L	0.000968	-0.00095 mg/L	0.000968	101.83%
Sbt	-0.6	-0.00029 mg/L	0.002535	-0.00029 mg/L	0.002535	870.72%
Set	-0.3	-0.00022 mg/L	0.000592	-0.00022 mg/L	0.000592	269.90%
Tlt	-13.0	-0.00456 mg/L	0.001360	-0.00456 mg/L	0.001360	29.80%
Vt	67.8	0.00042 mg/L	0.000002	0.00042 mg/L	0.000002	0.59%
Znt	-2.0	-0.00004 mg/L	0.000026	-0.00004 mg/L	0.000026	60.19%
Alxt	69.0	0.707 ug/L	0.2084	0.00071 mg/L	0.000208	29.46%
Bext	4.9	0.00180 ug/L	0.017453	0.00000 mg/L	0.000017	971.46%

Standard Preparation Worksheet & Certificate of Analysis

Reagent Lot #

HNO3 R# 100401 HCL R# 100370
IS = Yttrium(ME0509007)0.75mL + Scandium ME0606006)0.5mL to 1000mL w/ 2% HNO3

Standards	Lot #	Exp. Date	Dilution	
Calibration	ME0605001	(05/01/07)	1:10 ME0605008	
(Prepare daily)	ME0605002	(05/01/07)	1:10	
			CCV/ECV	MCV
CCV/MCV/ECV	ME0610005	(04/10/08)	1:20 ME0610006	1:40 ME0610007
(Prepare daily)				
Spike/LCS	ME0606004	(12/13/07)	1:100 ME0601006	
(Prepare daily)	ME0611007	(03/09/07)	1:100	
	ME0606003	(12/13/07)	1:200	
MRL	ME0609002	(03/25/07)	1:100 ME0603015	
(Prepare daily)				
ICSA	ME0701004	(07/05/07)		
ICSAB	ME0701005	(07/05/07)		
QC-25 1PPM	ME0612001	(05/01/07)		
Linearity	ME0610003	(01/15/07)		
Method Sr/Ti/Sn/SiO2				
Calibration	ME0610008	(04/20/07)		
CCV/ECV	ME0612002	(05/01/07)		
Spike/LCS	ME0612003	(05/01/07)	1:100	
(Prepare daily)				
MRL	ME0609005	(03/25/07)	1:100	
(Prepare daily)				
Method Li				
Std/ICV/MRL	ME0609003	(03/25/07)	1:1000, 200, 40, 10	
(Prepare daily)				
LCS/Spike	ME0701003	(07/04/07)	1:50	
(Prepare daily)				
ccv	ME0609005	(03/25/07)	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.

METALS STANDARD DOCUMENTATION

WBH 5/3/06

Standard:	ICPCalibration Stock Std #1	**ME #:**	0605001
Date Received/Prepped:	5/3/2006	**By:**	wbh
Date Expired:	5/1/2007	**Lot #:**	Z-MEB209110
Manufacturer:	Inorganic Ventures	**Certificate:**	Y
Matrix:	5% Nitric Acid	**NIST SRM:**	Varies
Amount:	500 mL	**Storage:**	Room Temp

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

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

CERTIFICATE OF ANALYSIS

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

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

2.0 **DESCRIPTION OF CRM**

ME060500 1

Custom Solution

Catalog No.: MWH-ICAP-CAL-1

Lot Number: **Z-MEB209110**

Matrix: 5% HNO3(abs)

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

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	99.7 ± 0.3 µg/mL	Arsenic, As	100.0 ± 0.3 µg/mL	Barium, Ba	100.0 ± 0.2 µg/mL
Beryllium, Be	39.94 ± 0.08 µg/mL	Cadmium, Cd	50.09 ± 0.21 µg/mL	Calcium, Ca	1,001 ± 2 µg/mL
Chromium+3, Cr3	100.0 ± 0.3 µg/mL	Cobalt, Co	100.2 ± 0.3 µg/mL	Copper, Cu	100.0 ± 0.3 µg/mL
Iron, Fe	100.4 ± 0.2 µg/mL	Lead, Pb	100.0 ± 0.2 µg/mL	Magnesium, Mg	999 ± 3 µg/mL
Manganese, Mn	100.1 ± 0.2 µg/mL	Nickel, Ni	99.8 ± 0.3 µg/mL	Potassium, K	996 ± 1 µg/mL
Selenium, Se	100.0 ± 0.3 µg/mL	Silver, Ag	19.99 ± 0.04 µg/mL	Sodium, Na	999 ± 1 µg/mL
Strontium, Sr	30.04 ± 0.11 µg/mL	Thallium, Tl	100.0 ± 0.3 µg/mL	Vanadium, V	100.0 ± 0.3 µg/mL
Zinc, Zn	100.0 ± 0.2 µg/mL				

Certified Density: 1.057 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:

Certified Value $(\bar{x}) = \frac{\sum x1}{n}$

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

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

$\sum s1$ = The summation of all significant estimated errors
(Most common are the errors from instrumental measurement weighting, dilution to volume, and the fixed error reported on the NIST SRM certificate of analysis.)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

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

This IV product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	992212
Al	EDTA	928	928
As	ICP Assay	3103a	010713
Ba	Gravimetric		See Sec. 4.2
Be	Gravimetric		See Sec. 4.2
Ca	EDTA	928	928
Cd	EDTA	928	928
Co	ICP Assay	3113	891102
Cr3	ICP Assay	3112a	990607
Cu	ICP Assay	3114	891811
Fe	ICP Assay	3126a	000606
K	Acidimetric	3141a	891312
K	ICP Assay	3141a	891312
Mg	ICP Assay	3131a	991107
Mn	EDTA	928	392110
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	000612
Pb	ICP Assay	3128	991504
Se	Gravimetric		See Sec. 4.2
Sr	EDTA	928	928
Tl	ICP Assay	3158	993012
V	EDTA	928	392110
Zn	ICP Assay	3168a	001402

ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	Volhard	999a	999a
Al	ICP Assay	3101a	010808
As	Gravimetric		See Sec. 4.2
Ba	ICP Assay	3104a	992907
Be	ICP Assay	3105a	892707
Ca	ICP Assay	3109a	000622
Cd	ICP Assay	3108	890312
Co	EDTA	928	392110
Cr3	Gravimetric		See Sec. 4.2
Cu	EDTA	928	392110
Fe	EDTA	928	928
K	Gravimetric	3141a	891312
Mg	EDTA	928	928
Mn	ICP Assay	3132	890903
Na	ICP Assay	3152a	990907
Ni	EDTA	928	392110
Pb	EDTA	928	392110
Se	ICP Assay	3149	992106
Sr	ICP Assay	3153a	990906
Tl	Gravimetric		See Sec. 4.2
V	ICP Assay	3165	992706
Zn	EDTA	928	392110

4.2 **BALANCE CALIBRATION** - All balances are checked daily using in-house procedure 6-IMM-001. 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 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 - 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

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.

- Elements Specific Information - For specific information regarding the elements in your blend: Go on line at www.inorganicventures.com/extras/pertable <http://www.inorganicventures.com/extras/pertable> Take advantage of our interavtive Periodic Table.
- E-mail Technical Support at ivtech@inorganicventures.com <mailto:ivtech@inorganicventures.com> at any time and a technical representative will respond within 24 business hours.
- Call our toll free Technical Support line at (800) 569-6799 or dial (7320 901-1900, Monday through Friday, from 8:00AM to

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 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 / IV Labs indicate a CRM shelf-life of four years for solutions packaged in 500-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. Inorganic Ventures / IV Labs concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

Certification Date: April 26, 2006
Expiration Date:

EXPIRES
1 JAN 2007

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Nick Maida, QA Administrator

Certificate Approved By: Katalin Le, QC Manager

Certifying Officer: Paul Gaines, PhD., Technical Director

Intial: wbh
Date: 5/3/06

METALS STANDARD DOCUMENTATION

Standard: ICPCalibration Stock Std #2
Date Received/Prepped: 5/3/2006
Date Expired: 5/1/2007
Manufacturer: Inorganic Ventures
Matrix: 5% Nitric Acid + Trace HF
Amount: 500 mL

ME #: 0605002
By: wbh
Lot #: Z-MEB209111
Certificate: Y
NIST SRM: Varies
Storage: Room Temp

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

INORGANIC VENTURES
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info@inorganicventures.com

CERTIFICATE OF ANALYSIS

MEB209111

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: **Z-MEB209111**

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

100.00 µg/mL each:
Mo, Sb, Sn, Ti,
50.00 µg/mL each:
B

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	99.9 ± 0.2 µg/mL	Boron, B	50.13 ± 0.11 µg/mL	Molybdenum, Mo	100.1 ± 0.3 µg/mL
Tin, Sn	100.1 ± 0.2 µg/mL	Titanium, Ti	100.1 ± 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:

Certified Value $(\bar{x}) = \frac{\sum x1}{n}$

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

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

$\sum s1$ = The summation of all significant estimated errors (Most common are the errors from instrumental measurement weighting, dilution to volume, and the fixed error reported on the NIST SRM certificate of analysis.)

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

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

· This IV product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors.

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	Gravimetric		See Sec. 4.2	Sn	ICP Assay	3161a	993107
Ti	Gravimetric		See Sec. 4.2	Ti	ICP Assay	3162a	992801

4.2 **BALANCE CALIBRATION** - All balances are checked daily using in-house procedure 6-IMM-001. 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 standa 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 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 - 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

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.

- Elements Specific Information - For specific information regarding the elements in your blend:

Go on line at www.inorganicventures.com/extras/pertable <http://www.inorganicventures.com/extras/pertable> Take advantage of our interavtive Periodic Table.

- E-mail Technical Support at ivtech@inorganicventures.com <mailto:ivtech@inorganicventures.com> at any time and a technical representative will respond within 24 business hours.
- Call our toll free Technical Support line at (800) 569-6799 or dial (7320 901-1900, Monday through Friday, from 8:00AM to

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.

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
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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 (UKA 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 / IV Labs indicate a CRM shelf-life of four years for solutions packaged in 500-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. Inorganic Ventures / IV Labs concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

Certification Date: April 26, 2006
Expiration Date: EXPIRES 1 May 2007

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Nick Maida, QA Administrator

Certificate Approved By: Katalin Le, QC Manager

Certifying Officer: Paul Gaines, PhD., Technical Director

Intial:
Date: 10/17/06

METALS STANDARD DOCUMENTATION

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

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

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

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Expiry: 4/10/2008

Certificate of Analysis

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

M706100 05

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

CWB
6/19/06

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

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

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Expiry: 12/13/2007

Certificate of Analysis

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

M706064

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.

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Intial: WBH
Date: 11/7/06

METALS STANDARD DOCUMENTATION

Standard:	ICP Spike solution	**ME #:**	0611007
Date Received/Prepped:	11/7/2006	**By:**	WBH
Date Expired:	3/9/2007	**Lot #:**	
Manufacturer:	MWH-WBH	**Certificate:**	Y
Matrix:	2% HNO3	**NIST SRM:**	3100 SERIES
Amount:	100mL x 2	**Storage:**	Room Temp

Component	Comment	Conc.	Unit:
AS	8.0mL ME0611005/100mL	80	ppm
PB	8.0mL ME0511020/100mL	80	ppm
SE	8.0mL ME0509003/100mL	80	ppm
TL	8.0mL ME0509006/100mL	80	ppm

Intial: WBH
Date: 11/6/06

METALS STANDARD DOCUMENTATION

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

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

INORGANIC VENTURES
CERTIFICATE OF ANALYSIS
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tel: 800.669.3799 - 732.901.1900
fax: 732.901.1903
info@inorganicventures.com

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

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

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

M706111005

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

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

Certified Density: 1.009 g/mL (measured at 22° C)

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

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

Uncertainty (±) = $\frac{2[(\sum s1)2]^{1/2}}{(n)^{1/2}}$ $\sum s1$ = The summation of all significant estimated errors (Most common are the errors from instrumental measurement weighting, dilution to volume, and the fixed error reported on the NIST SRM certificate of analysis.)

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

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

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

4.1 **Assay Method #1** **1004 ± 2 µg/mL 995 ± 2 µg/g (Avg 2 runs)**
ICP Assay NIST SRM 3103a Lot Number: 010713

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

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

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

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

Certification Date: September 15, 2005

Expiration Date: EXPIRES 1 Oct 2007

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Nick Maida, QA Administrator

Certificate Approved By: Katalin Le, QC Manager

Certifying Officer: Paul Gaines, PhD., Technical Director

Intial: WBH
Date: 6/9/06

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

Component	Comment	Conc. Unit:
CA	P/N 4400-130309	10000 PPM
K	per 500ml DI	4000 PPM
MG		4000 PPM
NA		10000 PPM

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CERTIFICATE OF ANALYSIS

P/N: 4400-130309
Lot Number: 06F102
Shelf Life: 18 months
Expiration Date: 12/13/2007

M70606003

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

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

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

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

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

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Intial: WBH
Date: 9/25/06

METALS STANDARD DOCUMENTATION

Standard: ICP MRL Working stock Solution
Date Received/Prepped: 9/25/2006
Date Expired: 3/25/2007
Manufacturer: MWH-WBH
Matrix: 5% HNO3
Amount: 2X100 mL

ME #: 0609002
By: WBH
Lot #:
Certificate:
NIST SRM:
Storage: Room Temp

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

Intial: WBH
Date: 9/25/06

METALS STANDARD DOCUMENTATION

Standard: ICP MRL Stock Solution
Date Received/Prepped: 9/25/2006
Date Expired: 9/20/2007
Manufacturer: CPI
Matrix: 2% HNO3 + tr HF
Amount: 100 mL

ME #: 0609001
By: WBH
Lot #: 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		100 ppm
Mn		2 ppm
Mo		20 ppm
Ni		20 ppm
K		1000 ppm
Se		100 ppm
Ag		10 ppm
Na		1000 ppm
Zn		20 ppm
V		2 ppm
Tl		10 ppm
Li		1 ppm
Ti		20 ppm
Sr		10 ppm
Sn		200 ppm

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M7060901

Expiry: 9/20/2007

Certificate of Analysis

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

MWH
Custom Standard
2% HNO3 + tr HF

Concentrations in ug/mL ± 0.5%

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

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

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

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

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Intial: WBH
Date: 1/5/07

METALS STANDARD DOCUMENTATION

Standard: Interference Check Std A(ICSA)
Date Received/Prepped: 1/5/2007
Date Expired: 7/5/2007
Manufacturer: MWH-WBH
Matrix: 5% HNO3
Amount: 500 mL

ME #: 0701004
By: WBH
Lot #: VARIUS
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

Intial: WBH
Date: 3/2/06

METALS STANDARD DOCUMENTATION

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

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

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

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CERTIFICATE OF ANALYSIS

P/N 4400-INTA1-500

CLP Interferents A Solution
in 5% HNO_3

Lot # 06A078

M060301

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

Elements and Concentrations: µg/mL

Al	5000	Ca	5000	Fe	2000	Mg	5000

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

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

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

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

Intial: WBH
Date: 1/5/07

METALS STANDARD DOCUMENTATION

Standard: Interfeerence Check Std AB(ICSAB)
Date Received/Prepped: 1/5/2007
Date Expired: 7/5/2007
Manufacturer: MWH-wbh
Matrix: 5% HNO3 + 10% HCl
Amount: 500 mL

ME #: 0701005
By: WBH
Lot #:
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

Intial: WBH
Date: 3/2/06

METALS STANDARD DOCUMENTATION

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

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

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

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CERTIFICATE OF ANALYSIS

P/N 4400-INTA1-500

CLP Interferents A Solution
in 5% HNO_3

M20603-01

Lot # 06A078

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

Elements and Concentrations: µg/mL

Al 5000 Ca 5000 Fe 2000 Mg 5000

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

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

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

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

Intial: WBH
Date: 3/2/06

METALS STANDARD DOCUMENTATION

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

ME #: 0603002
By: WBH
Lot #: 04L149
Certificate: Y
NIST SRM: 3100 series
Storage: Room Temp

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

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M70603.02

CERTIFICATE OF ANALYSIS

P/N 4400-INTB1-100

CLP Analytes B Solution
in 5% HNO_3

Lot # 04L149

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

Elements and Concentrations: µg/mL

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

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

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

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

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

Intial: WBH
Date: 12/1/06

METALS STANDARD DOCUMENTATION

Standard: ICP QC-25 1PPM
Date Received/Prepped: 12/1/2006
Date Expired: 5/1/2007
Manufacturer: MWH-WBH
Matrix: 5% HNO3
Amount: 500 mL

ME #: 0612001
By: WBH
Lot #: VARIUS
Certificate:
NIST SRM:
Storage: Room Temp

Component	Comment	Conc. Unit:
AG	5mL ME0608006+ 5mL ME0608007 per 500ml DI	1 PPM
AL		1 PPM
B		1 PPM
BA		1 PPM
BE		1 PPM
CA		1 PPM
CD		1 PPM
CO		1 PPM
CR		1 PPM
CU		1 PPM
FE		1 PPM
K		10 PPM
LI		1 PPM
MG		1 PPM
MN		1 PPM
MO		1 PPM
NA		1 PPM
NI		1 PPM
PB		1 PPM
SB		1 PPM
SE		1 PPM
SI		0.5 PPM
SR		1 PPM
TI		1 PPM
TL		1 PPM
V		1 PPM
ZN		1 PPM

Intial: WBH
Date: 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% HNO_3/tr. F^-/tr. Tartaric Acid **LOT NO.:** 062504J

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

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

Concentrations are given in µg/mL unless noted otherwise.

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

Crescent Chemical Co. Inc.

Julie M. MacIntosh
QA Manager

EXPIRES: August 2007

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 Dive, Islandia, NY 11749
(516) 348-0333 - Fax (516) 348-0913

Intial: WBH
Date: 8/31/06

METALS STANDARD DOCUMENTATION

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

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

ME060807

Laboratory Report - Certificate of Analysis

Environmental Multielement Standard

QC Check Standard 7

CATALOG NO: QC-007.1

CONTENTS: See Below

MATRIX: 5% HNO_3/tr. F^-

LOT NO.: 062504K

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

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

Concentrations are given in µg/mL unless noted otherwise.

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

Crescent Chemical Co. Inc.

Julie M. MacIntosh

QA Manager

EXPIRES: August 2007

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

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

Project No._____
Book No._____ TITLE _____

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LOG #	CLIENT	SKED	MIX	VOLUME	COMMENT
	200.7	01-09-07	JRF		HNO_3 R# 100401 → (1ml)
BLANK	DIGESTION				HCl R# 100361 → (2.5ml)
LCS					LCS/SPIKE
LCSD					ME 0606004
2701020011	ADEQ	POE003	AQ	50ml → 50ml	ME 0611007 → (0.5ml)
↓ MS	↓	↓	↓	↓	ME 0610004 → (0.250ml)
↓ MSD	↓	↓	↓	↓	
2701050074	KERRMCGEE	GW-11			MRL
2701050058		DISCHARGE			ME 0609002 → (50ml)
2701050179	SLCNTY	EFFLUENT			
2701040317	FLAGSTAFF	WCH EE			
	200.7	01-09-07	JRF		
	DIGEST				
	200.7	JRF	01-11-07		HNO_3 R# 100401 → (1ml)
BLANK	DIGESTION				HCl R# 100361 → (2.5ml)
LCS					LCS/SPIKE
LCSD					ME 0606004
2701090312	CENTRALA2	010907SK	AQ	50ml → 50ml	ME 0611007 → (0.5ml)
↓ MS	↓	↓	↓	↓	ME 0610004 → (0.25ml)
↓ MSD	↓	↓	↓	↓	
2701090313	CENTRAL A2	010907BDY			MRL
2701090170	KERRMCGEE	EFFLUENT			ME 0609002 → (50ml)
2701090303	KERRMCGEE	EFFLUENT			
2701090408	FLAGSTAFF	EFFLU CMT			
2612150009	ONITEK	B 606			
2612150011	↓	B 606	↓	↓	
	200.7	JRF	011607		
	DIGEST				

To Page No._____

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